



EU-CIVCAP

Preventing and Responding to Conflict: Developing EU
CIVILIAN CAPAbilities for a sustainable peace

Procedures, Personnel and Technologies for Conflict Prevention and Peacebuilding: An Assessment of EU Member States' Capabilities

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| Abstract | The report aims to provide an overview of the European Union (EU) Member States’ capabilities for conflict prevention and peacebuilding, focusing on personnel, procedures and technology and suggest recommendations to fill potential gaps. |
| Keywords | <ul style="list-style-type: none"> • Capabilities • Conflict Prevention • Peacebuilding • Personnel • Procedures • Technologies • Training • Recruitment |

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EXECUTIVE SUMMARY

The European Union (EU) and its Member States need adequate capabilities to prevent the outbreak of conflicts and to promote sustainable peace. Preventing wars and fostering peace are two of the most important goals of the EU, as described in the EU Global Strategy (2016) and in the Implementation Plan on Security and Defence (2016). This report aims to provide an overview of Member States' capabilities in conflict prevention and peacebuilding – namely personnel, procedures and technology – in light of key EU goals in the same domains. While acknowledging that the EU owns some of the capabilities that are suitable for these tasks, this report is primarily intended to highlight the assets and manpower available at the national level, with a view to understanding how these capabilities might support and strengthen the EU's external action in conflict prevention and peacebuilding. The core of the report maps key capabilities, in terms of personnel, procedures and technologies in four relevant countries: France, Germany, Italy, and Sweden.

The first step of this paper is the identification of the key goals of the European Union in conflict prevention and peacebuilding: external goals, tied to the mission and scope of the EU's external action, and internal/organisational goals, related to the management and procedures of the EU's institutions. To achieve these goals, the EU has developed a complex architecture for peace, which includes appropriate expertise and instruments in Common Security and Defence Policy (CSDP) missions, the European External Action Service (EEAS), EU Delegations, the European Commission, etc. Conflict prevention and peacebuilding related non-mandatory training activities are available to both Commission and EEAS staff in Delegations and at headquarters. Concerning CSDP missions, the EU has achieved significant improvement in training and recruitment, but some gaps are still present. In particular, training programmes should aim to better integrate the specific context where the personnel will operate, with a focus on understanding the local culture, history and traditions and more attention to the issue of local ownership.

Despite having received little attention in the academic literature, the use of technology in conflict prevention and peacebuilding activities is not a new topic for practitioners. This report shows how relevant actors at the national level have already developed technological tools and how these technologies can respond to the EU's objectives in conflict prevention and peacebuilding. In terms of capabilities, the EU countries considered in this report do have significant technologies that can be deployed to foster EU external action. This is particularly evident in the case of satellite systems and Unmanned Aerial Systems (UAS). However, 'less complex' systems such as phones, tablets, PCs and related applications/software were not particularly acknowledged during the interviews as tools for conflict prevention and peacebuilding. Despite these pronounced capabilities, awareness on the possible use and impact of Information and Communication Technologies (ICTs) on conflict prevention and peacebuilding is still limited at the Member State level. We argue that the use of technological tools would help the EU to strengthen its early warning system in order to swiftly assess crises, provide a more solid foundation for conflict analysis, and gain better situational

awareness. However, when it comes to fully exploiting the potential of technologies in conflict prevention and peacebuilding, two key problems remain: the first relates to the willingness of Member States to share data, while the second refers to the methodology of the EU's early warning system currently in place.

The comparison between the EU's objectives in conflict prevention and peacebuilding with the resources available at the EU and Member State levels led to different results in terms of personnel, procedures and technology. Personnel and procedures have significantly improved in recent years. Yet, to fulfil its objectives, the EU needs to work more in specific areas. The EU's instruments for conflict prevention and peacebuilding are in place, but they need to grow in terms of practical coordination. Member States could play a key role in both ensuring a better coordination and standardisation of training programmes and seconding well-prepared personnel for conflict prevention and peacebuilding to the EU institutions and in CSDP missions. In the context of the EU's comprehensive approach, integrating technological tools developed at national and EU level with other instruments can allow the creation of a functioning EU early warning/situational awareness system in order to anticipate, describe and diagnose conflicts accurately.

Against this background, the report puts forward some specific policy recommendations:

- 1) The EU needs coherent political strategies that start with all relevant players sharing a common understanding of the situation or challenge at stake.
- 2) The EU needs to improve the training system in two directions: first, to request and support context-based pre-deployment training for all personnel in CSDP missions; second, to coordinate with Member States for more specialised courses and for 'qualitatively relevant' seconded personnel in conflict prevention and peacebuilding-related positions.
- 3) The EU needs to fully implement the Goalkeeper system and to support Member States to implement recruitment models based on the most effective countries, for example, Germany and Sweden.
- 4) The EU needs to raise awareness within European and Member States' institutions of the possibilities provided by ICTs in conflict prevention and peacebuilding.
- 5) The EU should integrate and analyse data that are generated by various ICT systems and collected from different sources, hence establishing a comprehensive early warning/situational awareness system to gain a better understanding of conflict dynamics.
- 6) The EU should strengthen civilian defence/intelligence synergies in conflict prevention and peacebuilding with specific reference to early warning/situational awareness between EU and national institutions.

LIST OF ABBREVIATIONS

| | |
|----------|--|
| ASPR | Austrian Study Centre for Peace and Conflict Resolution |
| AU | African Union |
| CEP | Centre for European Perspective |
| CEWARN | Conflict Early Warning and Response Mechanism |
| CEWARU | Conflict Early Warning and Response Unit |
| CHG | Civilian Headline Goal |
| CMC | Crisis Management Centre |
| COSMO | COstellation of small Satellites for Mediterranean basin Observation |
| CPCC | Civilian Planning and Conduct Capability |
| CRMA | Crisis and Recovery Mapping and Analysis Project |
| CSDP | Common Security and Defence Policy |
| DDR | Disarmament, Demobilisation and Reintegration |
| DG DEVCO | Directorate-General for International Cooperation and Development |
| DRC | Democratic Republic of the Congo |
| DG ECHO | Directorate-General for Humanitarian Aid and Civil Protection |
| EEAS | European External Action Service |
| EGT | European Group of Training |
| ELINT | Electronic-signals Intelligence |
| ENA | Ecole National d'Administration |
| ENTRI | Europe's New Training Initiative for Civilian Crisis Management |
| EO | Earth Observation |
| ESDC | European Security and Defence College |
| ESS | European Security Strategy |
| EU | European Union |
| EUCTG | European Union Civilian Training Group |
| EUMTG | European Union Military Training Group |
| EUPFT | European Union Police Services Training |
| EUSG | European Union Global Strategy |
| EUSR | European Union Special Representative |
| FBA | Folke Bernadotte Academy |
| GIS | Geographical Information System |
| HEAT | Hostile Environment Awareness Training |
| HRVP | High Representative/Vice President |
| IcSP | Instrument contributing to Stability and Peace |
| ICT | Information and Communication Technology |
| IDP | Internal Displaced Person |
| IHEDN | Institute of Advanced Studies in National Defence |
| LRRD | Resilience and Linking Relief, Rehabilitation and Development |
| MFA | Ministry of Foreign Affairs |

| | |
|--------|---|
| MSB | Myndigheten för samhällsskydd och beredskap |
| NGO | Non-governmental organisation |
| NIIB | Netherlands Institute of International Relations Clingendael |
| NSC | National Steering Committee |
| P&S | Pooling and Sharing |
| PCRU | Post Conflict Reconstruction Unit |
| SatCom | Satellites Communication |
| SECPOL | Security Policy and Conflict Prevention |
| SEP | Swiss Expert Pool for Civilian Peace Building |
| SIDA | Swedish International Development Cooperation Agency |
| SJD | Standard Job Description |
| SPOT | Satellites Pour l'Observation de la Terre |
| SSR | Security Sector Reform |
| SSSUP | Scuola Superiore di Studi Universitari e di Perfezionamento Sant'Anna |
| SU | Stabilisation Unit |
| UAS | Unmanned Aerial Systems |
| UN | United Nations |
| UNDP | United Nations Development Programme |
| WP | Working Package |
| ZIF | Center for International Peace Operations |

1. INTRODUCTION¹

The European Union (EU) and its Member States need adequate capabilities to prevent the outbreak of conflicts and to promote sustainable peace. Preventing wars and fostering peace are two of the most important goals of the EU, as described in the Global Strategy for the European Union's Foreign and Security Policy² and in the Implementation Plan on Security and Defence³. By averting conflict and creating the conditions for a lasting peace, the EU aims to preserve lives and livelihoods, to holistically address the root causes of violence and to avoid conflict recurrence in war-torn countries, whose social, economic and political development has been plagued by internal strife⁴.

This report aims to provide an overview of Member States' capabilities in conflict prevention and peacebuilding, namely personnel, procedures and technology, in light of key EU goals in the same domains. While acknowledging that the EU owns some of the capabilities that are suitable for these tasks, this report is primarily intended to highlight the assets and manpower available at the national level, with a view to understanding how these capabilities might support and strengthen the EU's external action in conflict prevention and peacebuilding. Finally, this report also proposes recommendations to fill potential capability gaps.

In line with EU-CIVCAP's capability-based assessment framework⁵, the first step of our research is the identification of the EU's objectives in conflict prevention and peacebuilding, which is based on an analysis of relevant EU policy documents regarding the EU's external action at large, from the 2003 European Security Strategy (ESS) to the 2016 European Union Global Strategy (EUGS), including strategic, policy and operational documents. This analysis is followed by an appraisal of key civilian capabilities that the EU needs to acquire in order to reach the objectives established for conflict prevention and peacebuilding. This assessment is conducted through the analysis of primary documents (EU official documents) and secondary literature, including academic and think tank publications, among others.

The core of the report maps key capabilities, in terms of personnel, procedures and technologies in relevant case studies such as France, Germany, Italy, and Sweden, which were selected on the basis of four variables:

¹ The authors wish to thank Dr. Nicoletta Pirozzi (Senior Fellow, IAI) for the valuable inputs provided and the content editing of the final version of the paper and Mr. Cristian Barbieri (Junior Researcher, IAI) for the layout editing.

² EUGS, Shared Vision, Common Action: A Stronger Europe. A Global Strategy for the European Union's Foreign and Security Policy. 2016. See section 2 for further references concerning EU goals in conflict prevention and peacebuilding.

³ Council of the European Union, Implementation Plan for Security and Defence, 14 November 2016, available at: https://eeas.europa.eu/sites/eeas/files/eugs_implementation_plan_st14392.en16_0.pdf.

⁴ EEAS and European Commission. Addressing conflict prevention, peace-building and security issues under external cooperation instruments, November 2013.

⁵ EU-CIVCAP, *EU Capabilities for Conflict Prevention and Peacebuilding: A Capabilities-Based Assessment* (2016), internal document.

- 1) The importance of civilian capabilities owned and/or being acquired by a country, at national level or through multinational cooperation, and in particular at European level;
- 2) The importance of key civilian expertise employed and/or being trained by a country, at national or European level;
- 3) The contribution given to major Common Security and Defence Policy (CSDP) missions since 2003 (when the first ever CSDP mission was launched) in terms of personnel and/or assets;
- 4) The possibility to conduct more in-depth research thanks to consortium members' network of contacts among relevant experts and stakeholders.

The first two criteria, related to civilian capabilities, constitute the main rationale for the selection of these countries. The third and fourth variables complement the overall methodological approach. A qualitative approach has been adopted and semi-structured interviews have been conducted with key experts and stakeholders at institutional level for each case study.

The analysis of the case studies will be complemented with the analysis of capabilities at the EU level conducted in other working packages (WPs), in order to improve the quality and overall coherence of the EU-CIVCAP project as a whole⁶. Moreover, additional deliverables in WP2 will focus specifically on the analysis of dual-use technologies with application in conflict prevention and peacebuilding and on the assessment of the potential for pooling and sharing (P&S) of capabilities.

In the final section, the report offers a set of findings and recommendations on how capabilities currently owned, or in the process of being developed at Member State level, can effectively be used to help the EU achieve its key goals in conflict prevention and peacebuilding.

⁶ See for instance, EU-CIVCAP, DL 3.1 *Report on technological shortcomings in early warning and conflict analysis* (forthcoming), EU-CIVCAP, DL3.2, *Report on the EU's capacities for conflict prevention* and EU-CIVCAP, DL4.1, *Reacting to Conflict: Civilian Capabilities in the EU, UN and OSCE*, November 2016.

2. EUROPEAN UNION'S GOALS IN CONFLICT PREVENTION AND PEACEBUILDING

The first step of this paper is the identification of the key goals of the European Union in conflict prevention and peacebuilding. We divide these goals into two broad categories: external goals, tied to the mission and scope of the EU's external action, and internal/organisational goals, related to the management and procedures of the EU's institutions.

The research is mainly based on official institutional sources: strategic documents (from the ESS to the EUGS and the related Implementation Plan on Security and Defence), policy documents (Council Conclusions and declarations, High Representative's statements and reports, European Commission reports, etc.) and operational documents (Council Decisions, CONOPS, OPLAN, etc.).

2.1 External Goals

The external goals are related to the final aims of the EU's external action and are tied to its missions abroad. We divide these goals into four clusters: fundamental goals, timing of intervention, geographic areas of intervention, and thematic issues.

Fundamental goals for the EU's conflict prevention and peacebuilding are to preserve lives and livelihoods⁷, to address the root causes of conflicts in a holistic manner and to encompass activities aimed at establishing a sustainable peace environment in critical and unstable situations to avoid relapse into conflict. Overall, whenever possible, the EU must seek to prevent conflict before a crisis emerges or violence erupts – this is a constant and high priority for all EU diplomatic engagement⁸.

Secondly, the EU has specific goals related to the **timing of intervention**, including both short-term objectives, namely early warning and rapid response and long-term approaches. Early warning and early action are both part of a strategy based on prevention. Specifically, the Commission recommends the use of “new and existing EU early warning systems, including those of EU Member States, to identify emerging conflict and crisis risks, and identify possible mitigating actions”⁹; and to “work across EU institutions and with Member States to translate conflict and crisis risk analyses into specific conflict prevention measures, drawing on lessons learned from previous conflicts and crises”¹⁰. Early action is a crucial part of it:

to be credible as a security provider, the EU must be in a position to swiftly and effectively assess crises and mobilize its various instruments

⁷ EEAS and European Commission. Addressing conflict prevention, peace-building and security issues under external cooperation instruments, November 2013.

⁸ *Ibid.*

⁹ *Ibid.*

¹⁰ European Commission and HR/VP. Taking forward the EU's Comprehensive Approach to external conflicts and crises - Action Plan 2016-17, July 2016.

to address them, preventing and managing conflict. Early warning, advance planning, conflict prevention, regional security strategies and crisis management planning and execution should be more closely linked¹¹.

Dealing with conflicts for the EU also means working with long-term approaches in order to tackle both longstanding and new security threats:

long-term engagement in peace and state building and long-term sustainable development are essential to address the underlying causes of conflict and to build peaceful, resilient societies. The overall objectives of sustainable peace and development must be at the core of the EU's response from the outset – the EU must also have a long-term vision for its short-term engagements and actions¹².

In fact, as a bridge between the two approaches, it is imperative to “establish co-ordination systems between long-term and short-term objectives through dialogue among EU stakeholders including on the ground”¹³.

Geographically, the **areas of EU intervention** in conflict prevention and peacebuilding are third countries and regions: to prevent, prepare for, respond to, address and help recovery from conflicts, crises and other security threats *outside* its borders¹⁴. In the ESS, building security in the neighbourhood is identified as one of the three strategic objectives of the EU¹⁵. The EUGS mentions the surrounding regions as a priority: “The EU will engage in a practical and principled way in peacebuilding, concentrating our efforts in surrounding regions¹⁶ to the east and south, while considering engagement further afield on a case by case basis”¹⁷.

Finally, EU goals in conflict prevention and peacebuilding are focused on some **thematic areas**. In 2004 the Civilian Headline Goal (CHG) identified some of them: advising and training local police, preventing or mitigating internal crises and conflicts, restoring law and order in immediate post-conflict situations, supporting local police in safeguarding human rights, security sector reform (SSR)

¹¹ EEAS and European Commission. Addressing conflict prevention, peace-building and security issues under external cooperation instruments, November 2013.

¹² Council of the European Union. Council conclusions on the EU's comprehensive approach, May 2014.

¹³ *Ibid.* One of the key cross-cutting themes that will be addressed by the EU-CICAP project refers to the coordination between long-term and short-term approaches to conflict prevention and peacebuilding.

¹⁴ Council of the European Union. Internal security strategy for the European Union Towards a European security model, March 2010.

¹⁵ European Council. A Secure Europe In A Better World, December 2003.

¹⁶ The “surrounding regions” are identified as “to the east stretching into Central Asia, and south down to Central Africa. EUGS, Shared Vision, Common Action: A Stronger Europe. A Global Strategy for the European Union’s Foreign and Security Policy. 2016.

¹⁷ European Commission and HR/VP. Taking forward the EU's Comprehensive Approach to external conflicts and crises - Action Plan 2016-17, July 2016.

and disarmament, demobilisation, and reintegration (DDR)¹⁸. “Joint disarmament operations”, clearly a frequent need in post-conflict situations, are also mentioned by the Lisbon Treaty (TEU Art. 43.1). Human rights are confirmed by the EUGS as a clear thematic area among conflict prevention and peacebuilding goals: “we will act globally to address the root causes of conflict and poverty, and to champion the indivisibility and universality of human rights”¹⁹. Finally, gender equality is present in this category too²⁰.

2.2 Internal/Organisational Goals

The internal and organisational goals of the EU on conflict prevention and peacebuilding are related to the management and procedures of the EU’s institutions that establish the conditions for a full implementation of external goals. We divide these goals into six categories: credibility, coherence and comprehensiveness, coordination, synergies and partnerships, efficiency and effectiveness, and learning processes.

Credibility is a key feature underpinning Conflict prevention and peacebuilding. Peacebuilding and mediation are based on the credibility of the external actor involved, as explained by the Council: “the EU, as a global actor committed to the promotion of peace, democracy, human rights and sustainable development, is generally seen as a credible and ethical actor in situations of instability and conflict and is thus well placed to mediate, facilitate or support mediation and dialogue processes”²¹. The HRVP gave to ‘a credible Union’ a central role in the EUGS: “to engage responsibly with the world, credibility is essential”²².

Credibility depends on the **coherence** of the different actions implemented by the EU. In fact, a “coherent political strategy for conflict prevention”²³ is at the heart of EU work in this sector: “a coherent political strategy for conflict prevention, preparedness and response starts with all relevant players sharing a common understanding of the situation or the challenge”²⁴. As a consequence, “the EU has developed its conflict prevention and civilian peacebuilding capabilities trying to achieve internal coherence, creating tailor-made institutions and instruments, as well as developing partnerships”²⁵. It is therefore fundamental to “ensure strategic and operational coherence in external relations policy and strategy, including as regards the external impact of

¹⁸ Council of the European Union. Civilian Headline Goal 2008, December 2004.

¹⁹ EUGS, Shared Vision, Common Action: A Stronger Europe. A Global Strategy for the European Union’s Foreign and Security Policy. 2016.

²⁰ *Ibid.*

²¹ Council of the European Union. Concept on Strengthening EU Mediation and Dialogue Capacities, November 2009.

²² EUGS, Shared Vision, Common Action: A Stronger Europe. A Global Strategy for the European Union’s Foreign and Security Policy. 2016.

²³ *Ibid.*

²⁴ European Commission and HR/VP. The EU’s comprehensive approach to external conflict and crises, December 2013.

²⁵ *Ibid.*

internal policies”²⁶. Also “mediation initiatives need to be guided by the principle of policy coherence and undertaken in the broader context of EU policy objectives in external relations”²⁷.

Coherence is also linked to the comprehensive approach²⁸. This EU approach to external conflict and crises covers “all stages of the cycle of conflict or other external crises; through early warning and preparedness, conflict prevention, crisis response and management to early recovery, stabilisation and peace-building in order to help countries get back on track towards sustainable long-term development”²⁹. More specifically, “the connection between security and development is therefore a key underlying principle in the application of an EU comprehensive approach”³⁰. Implementing the EU’s comprehensive approach also means including “key cross cutting issues, particularly human rights, gender, protection of civilians, children and armed conflicts and responsibility to protect, in all areas of short and long term external action”³¹. Finally, the EUGS also refers to an integrated approach to conflicts³². This choice means implementing “a multi-dimensional approach through the use of all available policies and instruments aimed at conflict prevention, management and resolution”³³. Additionally, the EU will “pursue a multi-phased approach, acting at all stages of the conflict cycle [...], a multi-level approach to conflicts acting at the local, national, regional and global levels [...] [and] a multi-lateral approach engaging all those players present in a conflict and necessary for its resolution”³⁴.

Internal and external coordination are among the organisational goals of the Union and a precondition for effective interventions. As stated by the Treaty on the European Union, Member States are encouraged to: cooperate to reach objectives concerning expenditure on equipment, harmonise defence apparatuses, and coordinate training and logistics (TEU Art. 42.6). There is no minimum number of states required for cooperation to take place at this level, as opposed to the Treaty provisions on ‘enhanced cooperation’ (TEU Art. 20). The EU should therefore develop a single, common strategic vision for a conflict or crisis situation and for future EU engagement across policy areas³⁵. In addition, the Union shall “coordinate and where possible combine the use of a full range of EU tools and instruments [...] to craft a flexible and effective response during and after the stabilisation phase and in case of risks of conflict”³⁶.

²⁶ Council of the European Union. Council conclusions on Common Security and Defence Policy, November 2013.

²⁷ Council of the European Union. Concept on Strengthening EU Mediation and Dialogue Capacities, November 2009.

²⁸ See also EU-CIVCAP, DL 4.3 *Report on EU comprehensive approach to conflict prevention and peacebuilding* (forthcoming), EU-CIVCAP, and DL 4.5 *Report on implementation of comprehensive approach in Western Balkans and Horn of Africa* (forthcoming).

²⁹ European Commission and HR/VP. The EU’s comprehensive approach to external conflict and crises, December 2013.

³⁰ *Ibid.*

³¹ Council of the European Union. Council conclusions on conflict prevention, June 2011.

³² EUGS, Shared Vision, Common Action: A Stronger Europe. A Global Strategy for the European Union’s Foreign and Security Policy. 2016.

³³ *Ibid.*

³⁴ *Ibid.*

³⁵ Council of the European Union. Council conclusions on Common Security and Defence Policy, November 2013.

³⁶ European Commission and HR/VP. The EU’s comprehensive approach to external conflict and crises, December 2013.

Regarding **synergies with other relevant actors**, their main focus is on the non-governmental sector and other international and regional organisations. The Council of the EU explicitly stated that “the Crisis Management Procedures foresee consultation and co-operation with civilian actors, including non-governmental organisations (NGOs), and note that modalities for coordination in the field need to be developed in the context of ESDP. The aim, in particular, is to contribute to increasing the operational efficiency”³⁷. In 2009 the Council highlighted that the EU will strengthen its cooperation and networking with international partners, relevant non-governmental organisations and institutions, drawing on their knowledge, expertise and contacts³⁸. The involvement of diversified non-governmental actors has increased and their relevance was also pointed out by the HRVP in 2013, when she stressed the need to “engage more closely with major international NGOs, civil society, think-tanks, academia and public and private actors”³⁹ and it is mentioned several times in the EUGS⁴⁰.

The EU has traditionally operated abroad by establishing regional and global partnerships. The need to reinforce key partnerships in conflict prevention and peacebuilding is highlighted by several documents, for instance: “partnerships with key actors, notably the UN, World Bank, OSCE, NATO, the AU, other regional organisations and individual countries such as the US have been strengthened”⁴¹; the “importance of working with its partners, in particular the UN, NATO, OSCE, and African Union, as well as strategic partners and partner countries in its neighbourhood, with due respect to the institutional framework and decision-making autonomy of the EU” is recalled by the Council two years later⁴². In particular, the multilateral approach and the relationship with the United Nations are crucial, as confirmed by the EUGS: “the EU will promote a rules-based global order with multilateralism as its key principle and the United Nations at its core”⁴³.

Efficiency and effectiveness are internal goals in place through different mechanisms and approaches:

- Conflict- and rights-sensitive programming of external assistance to avoid fuelling conflicts indirectly⁴⁴;

³⁷ Council of the European Union. Recommendations for Enhancing Co-operation with Non-Governmental Organisations (NGOs) and Civil Society Organisations (CSOs) in the Framework of EU Civilian Crisis Management and Conflict Prevention. November 2006.

³⁸ Council of the European Union. Concept on Strengthening EU Mediation and Dialogue Capacities, November 2009.

³⁹ EEAS and European Commission. Addressing conflict prevention, peace-building and security issues under external cooperation instruments, November 2013.

⁴⁰ EUGS, Shared Vision, Common Action: A Stronger Europe. A Global Strategy for the European Union’s Foreign and Security Policy. 2016.

⁴¹ Council of the European Union. Council conclusions on conflict prevention, June 2011.

⁴² Council of the European Union. Council conclusions on Common Security and Defence Policy, November 2013.

⁴³ EUGS, Shared Vision, Common Action: A Stronger Europe. A Global Strategy for the European Union’s Foreign and Security Policy. 2016.

⁴⁴ *Ibid.*

- Effective utilisation of conflict risk analysis⁴⁵ and integration of conflict analysis in all foreign engagements from the very beginning⁴⁶;
- Cost-effective development of civilian capabilities⁴⁷;
- Use the Crisis Platform mechanism⁴⁸, chaired by the EEAS with the participation of Commission services, in a more systematic way to facilitate coordination⁴⁹;
- Strengthening the capacity of EU Delegations to contribute to conflict risk analysis⁵⁰;
- Developing procedures and capacities for rapid deployment of joint (EEAS, Commission services, Member States) field missions, where appropriate to conflict or crisis situations⁵¹;
- Mainstreaming human rights and gender into the operation/mission's management, leadership and organisation⁵²;
- Promoting the use of mediation as a tool of first response to emerging or on-going crisis, which is both effective and cost-efficient⁵³.

Early warning and early action represent a key challenge for conflict prevention and peacebuilding. With specific reference to early warning, the Council acknowledged that early warning

needs to be further strengthened within the EU, by better integrating existing early warning capacities and outputs from all sources, including from Member States, and drawing more extensively upon field-based information from EU Delegations and civil society actors, in order to provide a more solid foundation for conflict risk analysis. Enhancing early warning will also enable the EU to work more effectively with partners regarding responsibility to protect and the protection of human rights⁵⁴.

A final goal of EU conflict prevention and peacebuilding is the incorporation **of lessons learned and best practices**. The conflict prevention and peacebuilding sector is a relatively new field for the EU and it needs continuous innovation and improvement, as presented by the Commission: “lessons

⁴⁵ Council of the European Union. Council conclusions on conflict prevention, June 2011.

⁴⁶ European Commission and HR/VP. The EU's comprehensive approach to external conflict and crises, December 2013.

⁴⁷ Council of the European Union. Multi-annual Civilian Capability Development Plan: Action Lines for 2012-2013, July 2012.

⁴⁸ The Crisis Platform mechanism – which comprises a range of services across the EU system and is chaired by the High Representative, the EEAS Executive General (ESG) or the EEAS Managing Director for Crisis Response – can be convened on an *ad hoc* basis and is activated to guarantee EU responsiveness to external crises. More information on the Crisis Platform here: http://eeas.europa.eu/crisis-response/what-we-do/crisis-platform/index_en.htm.

⁴⁹ Council of the European Union. Council conclusions on Common Security and Defence Policy, November 2013.

⁵⁰ European Commission and HR/VP. The EU's comprehensive approach to external conflict and crises, December 2013.

⁵¹ EEAS and European Commission. Addressing conflict prevention, peace-building and security issues under external cooperation instruments, November 2013.

⁵² Council of the European Union. Internal security strategy for the European Union Towards a European security model, March 2010.

⁵³ European Commission and HR/VP. Taking forward the EU's Comprehensive Approach to external conflicts and crises - Action Plan 2016-17, July 2016.

⁵⁴ Council of the European Union. Council conclusions on conflict prevention, June 2011.

and best practices of civilian CSDP missions, lessons provided by Member States and from other actors should be integrated into civilian capability development at regular intervals” [...]. “The purpose is to transform lessons identified into lessons learned in the field of capability development by means of considering the lessons identified in relation to, i.e., the tasks list, the catalogue of standard job descriptions and any available plans for research and development”⁵⁵.

These internal and external objectives will be used as yardsticks for the assessment of EU capabilities in conflict prevention and peacebuilding. More specifically, the report examines the capabilities available at the Member State level by focusing on procedures, personnel and technologies.

⁵⁵ European Commission and HR/VP. The EU's comprehensive approach to external conflict and crises, December 2013.

3. RESOURCES FOR CONFLICT PREVENTION AND PEACEBUILDING

This section presents the resources on personnel, procedures and technology that are available to achieve the EU's objectives for conflict prevention and peacebuilding⁵⁶. These resources are analysed through the lens of the internal and external goals presented in the previous session and this preliminary overview of relevant literature and EU structures, procedures and resources is instrumental to the analysis of Member States' capabilities which will be conducted in the following section.

3.1 Organisational Resources and Procedures for EU Conflict Prevention and Peacebuilding

In the last 15 years, the EU has developed a diversified architecture for peace⁵⁷, and the Lisbon Treaty has significantly contributed to this process. As discussed in this section, CSDP missions are only a part of this architecture, which also includes appropriate expertise and instruments in the Commission, the European External Action Service (EEAS), EU Delegations, etc. Figure 1 shows the complexity of peacebuilding policies and how CSDP missions are considered a key component in the short- to medium-range (1-2 years)⁵⁸.

As shown in the previous section, the EU aims to “promote peace, its values and the well-being of its peoples” (TEU Art. 3(1) as amended by the Lisbon Treaty) and to “preserve peace, prevent conflicts and strengthen international security” (Art. 21(2)). In order to implement these objectives, conflict prevention and peacebuilding are at the heart of EEAS action. The 2011 Council Conclusions on Conflict Prevention, building on the Treaty of Lisbon (Art. 21c), have also provided the EU with a strong mandate to engage in conflict prevention.

The current EU early warning and prevention capabilities involve different actors and structures coordinated by the EEAS under the authority of the HRVP. The HRVP acts as the connection between the Foreign Affairs Council (decision-makers) and the EEAS and can also take initiatives on conflict prevention and mediation. This work is supported by the Conflict Prevention, Peacebuilding and Mediation Instruments Division at the EEAS, which aims to take real-time decisions in the anticipation of crises and the pursuit of peace. The Division works closely with Commission services on conflict-related policy development, including early warning, on the programming of long-term

⁵⁶ An important distinction here is between resources (for example, organisation, finance, staff or material) and capabilities. Resources are static and civilian capabilities are dynamic. Capabilities are about how resources can be made available for actual missions in support of certain policy objectives. EU-CIVCAP, *EU Capabilities for Conflict Prevention and Peacebuilding: A Capabilities-Based Assessment* (2016), internal document.

⁵⁷ European Centre for Development Policy Management (2012), *Factsheet – EEAS Mediation Support Project – Knowledge Product*, available at: <http://ecdpm.org/wp-content/uploads/2013/11/EEAS-Mediation-Factsheet-Dialogue-Prevent-Mitigate-Electoral-Violence.pdf>.

⁵⁸ This comprehensive approach is described (i.e. presenting the different areas of operation) in the document “Addressing conflict prevention, peace-building and security issues under external cooperation instruments” prepared jointly by the EEAS and EU Commission in 2013.

activities as well as on the implementation of conflict prevention and mediation assistance. The Division promotes greater sensitivity to conflict drivers and responsiveness in EU action. It contributes to the search for concrete solutions across a range of conflict situations and has taken direct part in a number of peace processes⁵⁹.

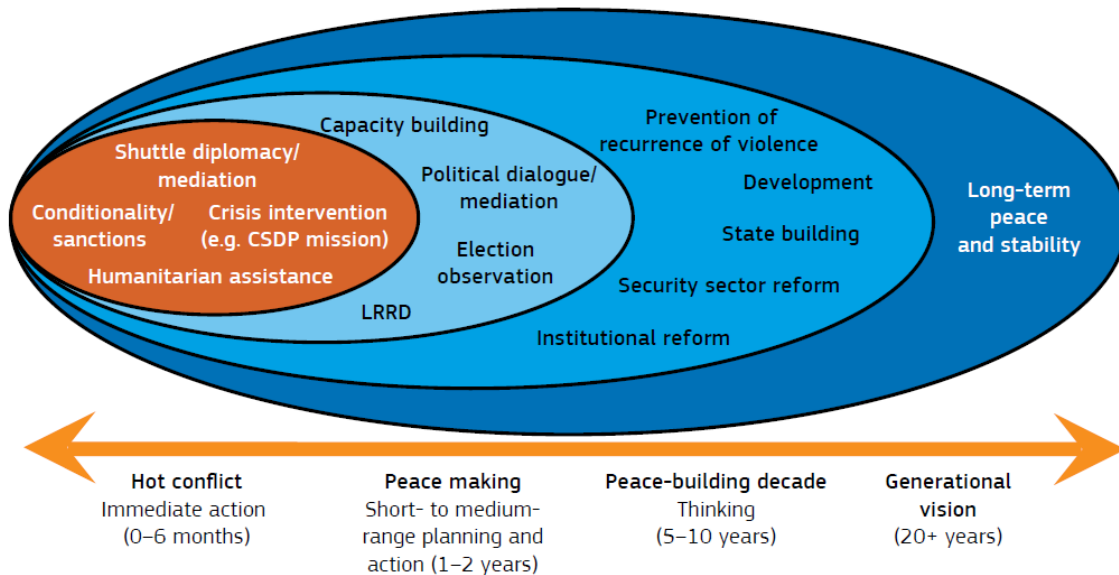


Figure 1 Complexity of Peacebuilding Operations, Source: European Commission, *EU Staff Handbook for Operating in Situations of conflict and Fragility*, June 2015, p.3.

Conflict prevention is implemented through long and short-term action. Long term actions include programs related to human rights protection, democracy, rule of law, education or disarmament. The short-term actions are based on economic, diplomatic and political measures. Some key financial instruments can be used both in the long or short run, as the Instrument contributing to Stability and Peace (IcSP)⁶⁰. This instrument is also responding to the EU’s objective to both intervene through specific instruments (e.g. DDR or SSR) and create partnerships with relevant non-governmental actors, which in many cases are the implementers of the projects.

The EU Conflict Early Warning System collects information from a number of different types of sources, both quantitative and qualitative. This gathering of information involves the EEAS, the Commission, the Member States and many civil society organisations. In fact, the system works in cooperation with Member States, external experts and civil society organisation, both in Europe and

⁵⁹ Conflict Prevention, Peace building and Mediation, available at https://eeas.europa.eu/topics/crisis-response/426/conflict-prevention-peace-building-and-mediation_en.

⁶⁰ Instrument contributing to Stability and Peace, preventing conflict around the world available at http://ec.europa.eu/dgs/fpi/what-we-do/instrument_contributing_to_stability_and_peace_en.htm. In March 2014 the Instrument for Stability (IfS) has been replaced by the Instrument contributing to Stability and Peace (IcSP). For information on the projects financed by the IcSP, ‘Insight on Conflict’ shows a world map displaying a general overview of IcSP-funded projects around the globe – around 250 projects in 70 countries with a total budget of EUR 2.3 billion for 2014-2020: <https://www.insightonconflict.org/icsp/>.

in other regions⁶¹. Thus, conflict prevention encompasses the systematic collection and analysis of information coming from a variety of sources in order to identify and understand the risks for violent conflict in a country and to develop strategic responses to mitigate those risks. It focuses on the highest global conflict risks, ongoing highly violent situations on a four-year time horizon. It communicates the risks or peacebuilding opportunities, and generates comprehensive options for EU-wide actions, which are monitored as part of the system's biannual cycle. It also works in synergy with existing EU tools and models as the InfoRM index for humanitarian and disaster risk supported by DG ECHO⁶². In this regard, this system for internal coordination can be seen as a step in the right direction to achieving the aforementioned EU objectives.

Mediation is also part of the EU's on-the-ground preventive diplomacy and the EU has played a crucial role in mediation and dialogue from the high-level work regarding Kosovo-Serbia to supporting grassroots work in the Philippines. Actors such as the EU Special Representatives are frequently engaged in mediation efforts, and complement the action of EU Delegations and CSDP missions.

The Commission has also internally developed the *EU Staff Handbook for Operating in Situations of Conflict and Fragility* with the support of two specialised units, distributed to staff in Delegations and geographic departments.⁶³ In addition, the Commission and the EEAS have jointly developed a *Guidance note on the use of Conflict Analysis in support of EU external action (2013)*, another relevant tool for conflict prevention and peacebuilding.

Overall, this architecture represents a comprehensive approach that covers all stages of the cycle of conflicts. Some mechanisms are recent and coordination needs to be strengthened in practice moving from mere comprehensiveness to full integration, in particular at Member State level. Also some specific aspects, for instance early action, need improvements in their application.⁶⁴

3.2 Personnel: Training and Recruitment

Training and recruitment are critical capabilities for EU conflict prevention and peacebuilding. The EU has achieved significant improvements, especially related to CSDP missions, but gaps and critical issues remain to be addressed both in the CSDP realm and in other frameworks, including those related to the role of the European Commission and EU Delegations.

⁶¹ Examples of projects implemented by partners, in particular civil society organisations are: the "Peace-building partnership", the "Strengthening Early Warning and Mobilising Early Action", the "Capacities for Peace", and the "Civil Society Dialogue Network".

⁶² EEAS, EU Conflict Early Warning System, Factsheet, September 2014, Online Available at http://eeas.europa.eu/archives/docs/cfsp/conflict_prevention/docs/201409_factsheet_conflict_earth_warning_en.pdf.

⁶³ European Commission, *Operating in situations of conflict and fragility: EU staff handbook*, June 2015.

⁶⁴ For more on this, please see DL3.2 Report on the EU's capacities for conflict prevention (forthcoming).

3.2.1 Training

Having well-trained personnel is crucial to enhancing the full effectiveness of EU civilian capabilities and to fulfilling the objective of intervening in specific areas (DDR, SSR, confidence building, etc.). Conflict prevention and peacebuilding related non-mandatory training activities are available to both Commission and EEAS staff in Delegations and at headquarters. SECPOL.2 division in the EEAS and the Fragility & Resilience Unit B.7 in DEVCO are both tasked with providing resources on fragility, conflict analysis, mediation and peacebuilding to EU staff. In particular, Unit B.7 in DEVCO is the key provider on conflict sensitivity for the European Commission staff, as per its mandate. The Mediation Support Team (SECPOL.2) can also provide tailor-made elective training courses for newly appointed staff, in particular Heads of Mission in conflict-affected countries. The following examples of the current courses illustrate the EU's training capabilities:

- *Course on EU External Action: Fragility, Security and Development in a Changing World:* a three-day introductory training course whose objective is to provide participants with knowledge on crisis management, fragility and development in the wider context of CSDP/CFSP. The course is geared to personnel working in/with countries where CSDP missions (or international security interventions) are deployed. This course is attended by DEVCO and EEAS staff, diplomatic, civilian and military personnel from EU Member States.
- *Inter-Agency Workshop on Working in Fragile Countries:* a three-day specialised workshop organised on the ground, in cooperation with other bilateral and multilateral donor agencies. The workshop aims to analyse and discuss the impact and results of EU policies on a regional level. The focus lies on common issues affecting fragile and conflict-affected countries in the region.
- *Workshops on Resilience at headquarters and country level:* a two-day seminar aiming to provide participants with the necessary guidance and support to apply the EU approach to resilience on the ground, through better coordination of humanitarian and development interventions. This course is attended by EU Delegations, DEVCO and ECHO field offices and headquarter staff from relevant services at the Commissions.
- *Delivering EU development assistance in fragile/crisis situations:* a three-day specific training course giving a thorough overview of current issues relating to fragility and crises in EU development policies and programmes, as well as of the international agenda; it fosters the exchange of relevant country experiences among participants. The course is attended primarily by DEVCO staff working on development assistance in situations of fragility and crisis.

In some cases, the EU has required the support of external providers through framework contracts. For instance, the project "Mediation Support to the European External Action Service (EEAS)" provides conflict prevention and mediation support to the EEAS and its partners, including "Preparing and delivering coaching and training formats targeting different levels, individuals and

teams within the EEAS and other EU institutions”⁶⁵. The project “ERMES - European resources for mediation support” is aimed at strengthening EU support to conflict mediation parties worldwide. As described in its blurb, “[t]he T.A. service will identify the relevant expertise and/or experts on mediation and dialogue to support third parties engaged in mediation and dialogue processes, including the deployment of experts to the field, drafting of research papers, and provision of training and coaching of individuals and/or groups”⁶⁶. A third example is represented by the institute ESSEC-Irene, which has been providing negotiation training to the European Commission staff since 2007, a series of training seminars since 2009, and a “Negotiation Learning Path”, for administrators advising the rotating Presidency of the Council since 2011. In addition, ESSEC-Irene provides a “Personalised Coaching Program” for high-ranking EU managers.

Currently, the NGO Saferworld and EEAS/DEVCO are developing an online course on conflict sensitivity for EU staff and more specific information will be published in the coming months. Finally, SECPOOL.2 provides two other services. A cross-institutional conflict analysis exercise and an early warning exercise conducted by the conflict analysis team in-country. They are not official training courses, but the exercises can be considered as learning tools. As presented in the EU-CIVCAP DL 3.2, extending the use of conflict analysis to other policy instruments such as those of DG Trade would considerably strengthen the EU’s potential for conflict prevention as a way of acting in the world⁶⁷.

The EU has therefore developed diversified courses on conflict prevention and peacebuilding, also in close collaboration with the leading NGOs and training institutes in this sector. These training mechanisms within the EU institutions represent a good transfer of expertise and are a useful response to personnel rotation and turnover. Whilst training and mentoring activities represent a cornerstone to improve EU internal capabilities, they are still fragmented and are not mandatory. It could be interesting to have mandatory paths for specific personnel, for instance for Commission or EAAS staff working on fragilities or for the staff deployed in Delegations in conflict areas.

Concerning CSDP missions, a decisive aspect is to establish an effective link between the EU’s training process and recruitment. Aware of these priorities, in 2004 the Council of the EU defined the objectives, principles and implementing policies and approaches for training in the “Draft EU Training Concept in ESDP”⁶⁸. Some of its principles and policies have guided the training policies in

⁶⁵ The Consortium four leading European institutions in this field: Berghof Foundation, ESSEC-Irene, MediatEUr, and Swisspeace: <http://www.berghof-foundation.org/programmes/dialogue-mediation-peace-support-structures/mediation-support-to-the-european-external-action-service-eeas/> .

⁶⁶ The Consortium is composed by 5 organisations specialising in conflict mediation: CMI - Crisis Management Initiative Martti Ahtisaari Centre (Finland), HD Centre - Centre for Humanitarian Dialogue Mediation for Peace (Switzerland), ACCORD - Africa Centre for the Constructive Resolution of Disputes (South Africa), SFCG - Search for Common Ground (Belgium), and IA- International Alert (United Kingdom) <http://www.transtec.be/website20/news/Transtec-strengthening-EU-support-to-conflict-mediation-parties-worldwide-.html> .

⁶⁷ European Peacebuilding Liaison Office, *The EU’s capabilities for conflict prevention*, forthcoming.

⁶⁸ Council of the European Union, *Draft EU Training Concept in ESDP*, 2004, available at https://eeas.europa.eu/csdp/documents/pdf/trainingconcept_en.pdf.

recent years (i.e. the training process described below), others have not been fully implemented (for instance, the Goalkeeper project, discussed below)⁶⁹. The document establishes the overall training cycle at EU level, which consists of three phases:

- 1) *Conduct*: based on this analysis, to design the annual EU Training Programme, which is electronically available in Schoolmaster (see below), listing the training activities of all relevant training actors in the field of CSDP;
- 2) *Evaluation*: to conduct and implement the EU Training Programme by relevant actors;
- 3) *Assessment*: to evaluate lessons to be taken into account when starting the new cycle of analysing the training requirements for the next year's training programme. The assessment is done through the Comprehensive Annual Report on CSDP and CSDP-related Training (CART)⁷⁰.

At the time of writing, two important documents are under discussion by the EU institutions, which could partially reform CSDP training programmes. The first is the *EU Policy on Training for CSDP* and the other is *Implementing Guidelines for the EU Policy on Training for CSDP*. These documents are considered in this section to present possible trends beyond the current practices and legislation.

Currently, the training cycle for civilians in CSDP missions is divided into six phases⁷¹:

- 1) *Core course*, designed to provide participants with the basic knowledge and skills required on a mission, independent of the specific function they will fulfil as experts in their own fields (10-12 days);
- 2) *Specialisation courses*, on single tasks for civilians (child protection, rule of law, conflict analysis & conflict sensitivity, etc.) (5-10 days);
- 3) *Personal security*, i.e. Hostile Environment Awareness Training (HEAT) (5 days);
- 4) *Mission induction*, in-country training on the specific mission (1-2 days);
- 5) *In mission training*, on specific issues during the mission;
- 6) *De-briefing*, after the mission in the seconding country.

A critical issue of this training cycle is the objective of internal coordination (who is responsible for what). Currently, sending countries (if the personnel are seconded) are responsible for pre-deployment training, while the mission induction and the in-mission training fall within the responsibility of the mission itself. However, responsibilities for the other training phases and for training of local staff are not defined. Due to these ambiguities, civilian training systems in the EU

⁶⁹ On this topic, see also: Hylke Dijkstra, Petar Petrov, and Ewa Mahr (2016), "Reacting to Conflict: Civilian Capabilities in the EU, UN and OSCE," *EU-CIVCAP Report*, DL4.1, available at http://www.eu-civcap.net/files/2016/11/Reacting_Conflict-Civilian_Capabilities_EU_UN_OSCE.pdf.

⁷⁰ European Commission, Comprehensive Annual Report on CSDP and CSDP-related Training (CART), November 2011, http://eeas.europa.eu/csdp/documents/pdf/st17438_en11_en.pdf.

⁷¹ Andrea de Guttry, 'Le missioni civili dell'Unione europea: le sfide per la formazione ed il reclutamento', in Azzoni, Alessandro, Pirozzi, Nicoletta (eds.), *Civili in missione: l'esperienza italiana nelle missioni dell'Unione europea*, 2016, pp. 45-55, http://www.iai.it/sites/default/files/civili_in_missione.pdf.

often lack relevant training modules or duplicate some of them⁷². In the last 15 years, some relevant issues have emerged at Member State level, for instance the lack of specific resources for training or scarce coordination and standardisation of the courses⁷³.

The EU has tried, to a certain extent, to improve the standardisation of training with some positive results, even if training activities still suffer from limited coordination and diverse approaches and models. Among the tangible progresses, for instance, the Comprehensive Annual Report on CART published in 2011 listed some feedback received from field missions and themes which should have been considered for future training courses⁷⁴. Some of them – for instance CSDP missions' administrative, financial and procurement procedures, mentoring, monitoring and advising, hostile environment security/awareness training or reporting skills – are presently part of the specialisation courses and are certified by the EU.

Currently, at the EU level, the main training provider on civilian capabilities is Europe's New Training Initiative for Civilian Crisis Management (ENTRi)⁷⁵. ENTRi⁷⁶ is an initiative funded by the European Commission (90%) and co-funded by its 12 implementing partners based in European countries and led by the Center for International Peace Operations (ZIF)⁷⁷ (see Table 1). Before ENTRi, the European Group of Training (EGT) was established in 2001, with similar but less structured objectives and ran until 2009. L'EGT was the result of the European Commission's project on Training for Civilian Aspects of Crisis Management launched in 2001, which created the first training standards and *core groups* of training centres.

ENTRi is currently in the third project phase (2016-2019) and is set to run until May 2019⁷⁸. ENTRi courses are not designed to replace any existing courses that governments and sending institutions organise to prepare individuals for possible deployment in crisis management operations. Instead, ENTRi was created to foster the harmonisation of European and international approaches to capacity-building, with a view to creating synergies between European and international institutions⁷⁹.

⁷² *Ibid.*

⁷³ Andrea de Guttery, "Le missioni civili dell'Unione europea", 2016.

⁷⁴ European Commission, Comprehensive Annual Report on CSDP and CSDP-related Training (CART), November 2011.

⁷⁵ Military and police trainings are implemented by: ESDC (European Security and Defence College), CEPOL (European Police College), EUPST (European Union Police Services Training) and EDA (European Defence Agency).

⁷⁶ <http://www.entriforccm.eu/about/about.html>.

⁷⁷ <http://www.zif-berlin.org/en/>.

⁷⁸ The total budget of the programme since its inception is €8 million. ENTRi was created by the European Union's Instrument contributing to Stability and Peace (IcSP) and is guided by the European Commission's Service for Foreign Policy Instruments (FPI), which is co-located with the European External Action Service. At mid-2016, 1741 individuals of 97 different nationalities were trained in a total of 82 ENTRi courses. Europe's New Training Initiative for Civilian Crisis Management (ENTRi) certifies training courses in the field of civilian crisis management. A C³MC-label is awarded to courses that meet established standards and criteria for training civilian personnel that are to be deployed to crisis management missions.

⁷⁹ ENTRi also cooperates closely with the three associate partners: the Organization for Security and Co-operation in Europe (OSCE), the United Nations Department of Peacekeeping Operations (UN-DPKO) and the European Security and Defence College (ESDC).


| ENTRi partners | |
|--|---|
| Austrian Study Centre for Peace and Conflict Resolution (ASPR), Austria |  |
| Royal Institute for International Relations (Egmont), Belgium |  |
| Diplomatic Institute, Bulgaria |  |
| Crisis Management Centre (CMC), Finland |  |
| Ecole Nationale d'Administration (ENA), France |  |
| Scuola Superiore Sant'Anna (SSSUP), Italy |  |
| Netherlands Institute of International Relations Clingendael (NIIB), Netherlands |  |
| Centre for European Perspective (CEP), Slovenia |  |
| Folke Bernadotte Academy (FBA), Sweden |  |
| Swiss Expert Pool for Civilian Peace Building (SEP), Switzerland |  |
| Stabilisation Unit (SU), United Kingdom |  |
| Center for International Peace Operation (ZIF), Germany |  |

Table 1 The 12 implementing partners of the ENTRi Network

Overall, ENTRi has therefore improved the training system for peace operations. The consortium presents a valid array of courses and they could improve the effectiveness of the personnel deployed in a CSDP mission. However, some gaps are still present and deserve attention. First, training activities – or at least some of them, as the mission induction and the in-mission training – could focus more on the specific context where the personnel will operate with a significant understanding of local culture, history and traditions. Second, more attention should be given to local ownership and to the relationship with civil society organisations, both local and international, in the training modules. These two points are also linked: a good understanding of local cultural issues fosters local ownership. Moreover, synergies among civilian, military and police components could be improved, also through joint practical exercises⁸⁰.

The future role of the European Security and Defence College (ESDC)⁸¹ as the potential main coordinator for all CSDP courses is a subject of current debate. The working draft of the EU Policy on Training for CSDP (version: 1 July 2016) presents the ESDC as a promoter of a “culture of excellence, a common understanding of CSDP among civilian and military personnel and to identify and disseminate, through its training activities, best practice”.

From a Member State’s perspective, some political resistances could hamper this process of centralisation however. The ESDC network currently includes several nationally based institutes and training centres. Their direct involvement through a decentralised structure represents a good equilibrium between coordination and valorisation of the existing centres and their capabilities. This asset could also be improved by combining more effectively the ESDC’s military features with genuine civilian approaches. In fact, even if in the last few years the ESDC has increasingly included specific civilian courses, civilian participants and trainers, its military background is still in evidence. In addition, CSDP missions are just one part of the EU’s integrated approach to conflict prevention and peacebuilding and, consequently, the training policy should include all the instruments and structures working in this area.

Interestingly, the draft of *Implementing Guidelines for the EU Policy on Training for CSDP* (version 1, June 2016) envisage two training groups: the EU Civilian Training Group (EUCTG) and the EU Military Training Group (EUMTG). The ESDC is considered as the “main training actor providing civ/mil training in the field of CSDP, with special focus on CSDP training courses on political-strategic, strategic and operational levels, also holding a major role within the CSDP training architecture”. In addition, ESDC “shall act as a facilitator between the two training groups as far as civ/mil training is concerned”. In this new architecture, the ESDC plays an important role in civil-military interactions and strives to avoid ‘silo thinking’. At the same time, civil-military relations should be considered in all courses and become a horizontal theme in EU training activities. Similarly, local ownership should be present as a cross-cutting issue in all courses.

⁸⁰ Andrea de Guttry, “Le missioni civili dell’Unione europea”, 2016.

⁸¹ This aspect will be discussed further in EU-CIVCAP DL2.5 Policy paper on pooling and sharing of capabilities.

Another key programme supporting training and recruitment is the Goalkeeper project. The Goalkeeper project⁸² started in 2007 in the General Secretariat of the Council and in April 2013 the project was transferred to the EEAS, where it is managed by CMPD 2 - Capabilities, Concepts, Training and Exercises Division - and developed and maintained by the EEAS IT Division. On 1 January 2016, the administrative management of the Goalkeeper Project was fully transferred to the EEAS.

The Goalkeeper platform is composed of: Schoolmaster, Registrar, Headhunter, and Governor, each one with specific objectives to support civilian capabilities' training, recruitment and deployment. Schoolmaster is an online database containing information on all courses delivered throughout the EU that are relevant to the European Union's Common Security and Defence Policy. Whether delivered by Member States' training institutions or by the EU itself, all courses in Schoolmaster are in principle open to participants from all Member States. The Registrar module is devoted to recruitment and deployment and is analysed in the next section.



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About Goalkeeper

The Goalkeeper platform is made of four on-line modules: **Schoolmaster**, **Registrar**, **Headhunter**, and **Governor**, each one with specific objectives to support civilian capabilities' development and deployment.

Schoolmaster

In the area of training, the **Schoolmaster** database is aimed at capturing and making easily accessible at a central location the largest possible amount of information on training opportunities relevant to CSDP and international crisis management for both specialized audiences and the interested public.

Registrar

The **Registrar** module is designed to provide EU Member States and the EEAS with a web-based technology that allows

- the standardized management of civilian personnel for potential deployment to CSDP missions;
- the electronic management - creation and submission - of applications from Member States to the EU for seconded positions in CSDP missions;
- the establishment of statistics at national and EU level with a view to civilian capability development.

Headhunter

The **Headhunter** module aims at facilitating and expediting the production of job descriptions for positions in civilian CSDP missions. A catalogue of Standard Job Descriptions is made accessible to the EEAS in Brussels and human resources officers in CSDP missions as a reference instrument for the creation of mission-specific job descriptions to be published in mission-specific Calls for Contributions.

Governor

The stand-alone module **Governor** is the on-line database of the conceptual documents governing EU civilian crisis management under CSDP and the national measures in the area of civilian crisis management that Member States may want to make accessible to accredited users.

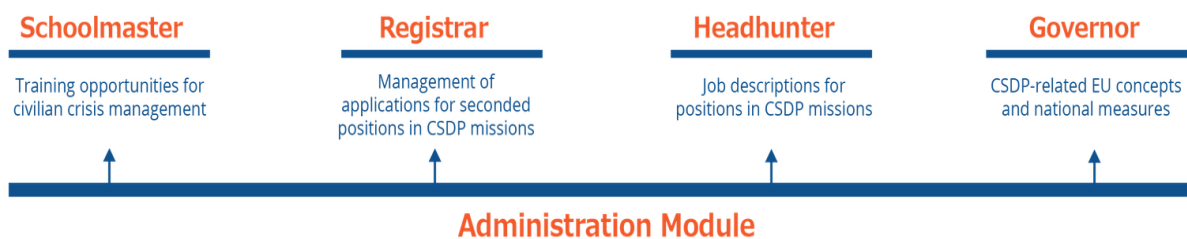


Figure 2 The Goalkeeper website and structure. Source: <https://goalkeeper.eeas.europa.eu/about.do> (23/11/2016)

The project could play a pivotal role in fostering the EU's training and recruitment of civilian personnel. However, the implementation of the project has suffered from delays. In 2013, the Council of the European Union mentioned that "The Goalkeeper project is now well on the way to being finalised in 2013"⁸³. However, after years of very limited progress, in 2016 the website has

⁸² See <https://goalkeeper.eeas.europa.eu>.

⁸³ Council of the European Union, *Third report on Member States' progress in facilitating the deployment of civilian personnel to CSDP missions*, 2013.

made some tangible progress. At the time of writing (October 2016), the technical full operationalisation of the system is envisaged for the end of 2016, the test-period should run in the first months of 2017 and the Goalkeeper should be fully functional in spring 2017.

3.2.2 Recruitment

Strong links between training and recruitment is still a work in progress. One link concerns the personnel seconded by Member States to the Commission, EEAS, European Union Special Representatives (EUSRs) and EU Delegations. Well-trained seconded personnel on conflict prevention and peacebuilding can provide a solid contribution to the EU's peace architecture.

Concerning CSDP missions, filling the training-recruitment gap should be a priority for the coming years to improve the effectiveness of civilian personnel. In quantitative terms, the number of personnel deployed in civilian CSDP missions at the end of August 2016 amounted to a total of 2,542; 885 of them are seconded (866 seconded by member states and 19 by third states⁸⁴) and 1,657 contracted (457 international contracted and 1,200 local contracted). In recent years, there has been a marked decline in the number of seconded personnel, while the number of contracted personnel has increased. This trend is likely to continue in the coming years. The countries seconding more personnel are Germany (124) and Poland (124), Sweden (85), Italy (49) and Finland (48). Women are under-represented and constitute the 29.1% of the personnel in the CSDP missions. More specifically, female personnel represent 21.1% of seconded staff, 27.5% of contracted staff and 35.6% of local staff⁸⁵. The trend in recent years is for an increase in women's participation and Member States should train and recruit more female personnel to continue to reduce the gender gap.

The personnel of a mission could be *seconded* or *contracted* (both internationally and locally). Secondment means that individuals are nominated by their respective Member States and the final decision on recruitment falls to the EU. The contributing state will bear all personnel-related costs. International contracted staff are recruited by each mission through an employment contract⁸⁶. The recruitment mechanism of seconded civilian personnel is therefore decentralised and conducted through Member States, but only some of them have developed rosters or similar mechanisms to select the relevant experts in the requested timeframe. In addition, rosters at Member State level are still heterogeneous and the road to harmonisation and standardisation of existing rosters seems practicable but long, and tied to the success of the Goalkeeper project.

For now, while some of them keep a central roster at national level, others rely on one or more separate rosters kept by individual ministries or services and focus on specific expertise. Good practices include the Post Conflict Reconstruction Unit (PCRU) in the UK and the ZIF in Germany,

⁸⁴ Canada, Georgia, Norway, Switzerland, Turkey and United States.

⁸⁵ EEAS, *Personnel Figures of the Civilian CSDP Missions as of 31/08/2016*.

⁸⁶ Vacancies are published online in the webpage: http://eeas.europa.eu/headquarters/headquarters-homepage/search/site_en/?f%5B0%5D=bundle%3Aeeas_job_vacancy&f%5B1%5D=im_field_er_thematics%3A285.

cited earlier. However, only a few Member States include experts from outside national administrations in their rosters for civilian deployments, whereas in most cases national recruitment practices fail to reach relevant experts that are employed in the private, NGO or academic sectors⁸⁷. As a consequence, it is even more difficult to find relevant expertise in some civilian sectors (i.e. rule of law experts, senior policy advisors, etc.) and states are more exposed to the risk of sending personnel who are not fully adequate for a position. For instance, according to the interviews conducted on the four case studies analysed in the next section, the main gaps shown by seconded personnel are related to linguistic skills, the ability to work in a multicultural setting, conflict sensitivity and the stamina to work in a hostile environment.

Deployment procedures at national level also present considerable problems that need to be addressed, especially in terms of the legal, administrative and financial conditions for the secondment of civilian personnel⁸⁸. Incentives (e.g. career opportunities and better salaries) in public service are rare and in jeopardy. International contracted staff are considered as freelance and consultants and do not receive any direct career benefit within the EU institutions.

As part of the Goalkeeper programme, the Registrar module is designed to provide EU Member States and the EEAS with a web-based technology that allows the standardised management of civilian personnel for potential deployment, the electronic management of applications for seconded positions in CSDP missions and the establishment of statistics at national and EU level. The Headhunter module aims to facilitate and expedite the production of job descriptions for positions in civilian CSDP missions. A catalogue of Standard Job Descriptions (SJD) is made accessible to the EEAS in Brussels and human resources officers in CSDP missions as a reference instrument for the creation of mission-specific job descriptions to be published in mission-specific Calls for Contributions. However, in September 2016 the Civilian Planning and Conduct Capability (CPCC) published the document “Force generation for the Civilian CSDP Missions: A planning guide for Member States Seconding Authorities”⁸⁹ that substitutes the catalogue of SJD. This document defines new approaches to recruitment and renovated job categories⁹⁰, developing a roadmap to improve the EU’s objective to intervene through specific civilian approaches and highly qualified personnel.

Overall, the full adoption of the Goalkeeper system could considerably facilitate the civilian capability development process, but its successful implementation will depend on the buy-in of both

⁸⁷Nicoletta Pirozzi, ‘EU Performance in Civilian Crisis Management’, in Richard Whitman and Stefan Wolff (eds.), *The European Union as a Global Conflict Manager*, London and New York, Routledge, May 2012, pp. 189-208.

⁸⁸Nicoletta Pirozzi, ‘EU Performance in Civilian Crisis Management’, in Richard Whitman and Stefan Wolff (eds.), *The European Union as a Global Conflict Manager*, London and New York, Routledge, May 2012, pp. 189-208.

⁸⁹ CPCC, *Force generation for the Civilian CSDP Missions: A planning guide for Member States Seconding Authorities*, September 2016, <https://www.lyyti.fi/att/845AC0/86045F98A9719c50957dFB2F1Fc0F5869aa722F94FAC9EBF92c0C57>.

⁹⁰ For instance, there are Management Categories (i.e., Deputy Head of Mission, Chief of Staff, Head of Operations, etc.) and Mission Support (Head of Technical Services, Head of Unit, etc.). The General Essential (integrity, communication skills, language skills, etc.) and Desirable Requirements (knowledge of the EU Institutions, driving licence, etc.) across all functional roles are defined.

EU actors – CPCC and Human Resources officers in CSDP missions – and national authorities – beyond Ministries of Foreign Affairs⁹¹. A full functioning Goalkeeper system could answer also to the EU’s objectives of more coordination among Member States on training and recruitment and to strengthen early warning and rapid response.

With reference to changing (and future) needs in CSDP missions, the recent *Implementation Plan on Security and Defence*⁹² refers to “revisiting the Feira priority areas for civilian missions in light of the profoundly changed security environment” (p. 4). From an EUGS perspective, the trend seems to be towards smaller, integrated, capacity-building missions with more skills tied to fragility and resilience.⁹³ If the CSDP missions will move in this direction, the future requested skills could also include more soft knowledge related to: resilience, security-development nexus, confidence-building, and local understanding from different corners (anthropology, sociology, history, etc.).

3.3 Technologies for Conflict Prevention and Peacebuilding⁹⁴

Despite having received little attention in the academic literature, the use of technology in conflict prevention and peacebuilding activities is not a new topic for practitioners. As demonstrated by the initiatives of organisations such as the “ICT4Peace Foundation” and “PeaceTech Lab” and “Build Peace|Peace Through Technology,” in recent years some international, national and local actors have been increasingly including technological tools in conflict prevention and peacebuilding programs⁹⁵. According to the most relevant reports and papers, there seems to be a consensus among experts that technologies improve the capacity to predict, describe and diagnose conflict thanks to the possibility of generating, accessing and sharing data in conflict prone situations⁹⁶.

⁹¹Nicoletta Pirozzi, “The European Union and Civilian Crisis Management after Lisbon”, in *European Foreign Affairs Review* 20, no. 2 (2015): 283–302.

⁹² Council of the European Union. *Implementation Plan on Security and Defence*, November 2016.

⁹³ EUGS, *Shared Vision, Common Action: A Stronger Europe. A Global Strategy for the European Union’s Foreign and Security Policy*. 2016.

⁹⁴ While the focus of our research will be ICTs application in a civilian dimension, what emerged from our study is that often they are operated by armed forces within EU military operations, but not with combat tasks. Equally, the first satellite systems were conceived purely out of defence needs, but the overlapping between civilian and military competences, in EU operations particularly, led to the creation of dual-use systems resulting in an invaluable source for monitoring and surveillance.

⁹⁵ Brahimi Report Report of the Panel on United Nations Peace Operations (2000), http://www.un.org/en/events/pastevents/brahimi_report.shtml. Initiatives and reports of ICT4Peace Foundation, PeaceTech Lab can be found here: <http://ict4peace.org/>; <http://www.peacetechlab.org/>; <http://howtobuildpeace.org/>.

⁹⁶ Some relevant academic endeavours to uncover the relationship between technology and peacebuilding/conflict prevention in a comprehensive manner include Ioannis Tellidis and Stephanie Kappler, ‘Information and communication technologies in peacebuilding: Implications, opportunities and challenges’, *Cooperation and Conflict* 2016, Vol. 51(1), pp. 75–93; Helena Puig Larrauri and Anne Kahl, 2013, «Technology for Peacebuilding», *Stability: International Journal of Security and Development* <http://www.stabilityjournal.org/articles/10.5334/sta.cv/>; Mancini (2013), *New Technology and the Prevention of Violence and Conflict* <https://www.ipinst.org/2013/04/new-technology-and-the-prevention-of-violence-and-conflict>. According to these works, technology might be also used to include grassroots opinions in the public debate, convey and shape a different narrative from the official governmental one, challenge the concept of identity in societies where ethnic or religious issues are dominant, to shape positive behaviours and dwarf attitudes that can disrupt PaCP processes. In this respect, see: Puig Larrauri and

Indeed, as Puig Larraui and Kahl put it: “The best thing that new technologies can offer peacebuilding practitioners is an opportunity to re-engineer existing data information gathering processes, digitize collected data, and produce better analyses by comparing data that was previously held in silos”⁹⁷.

| EU goals in early warning and early response |
|--|
| <p>“New and existing EU early warning systems, including those of EU Member States, to identify emerging conflict and crisis risks, and identify possible mitigating actions”; and to “work across EU institutions and with Member States to translate conflict and crisis risk analyses into specific conflict prevention measures, drawing on lessons learned from previous conflicts and crises”.</p> |
| <p>“To be credible as a security provider, the EU must be in a position to swiftly and effectively assess crises and mobilize its various instruments to address them, preventing and managing conflict. Early warning, advance planning, conflict prevention, regional security strategies and crisis management planning and execution should be more closely linked”.</p> |
| <p>“A coherent political strategy for conflict prevention, preparedness and response starts with all relevant players sharing a common understanding of the situation or the challenge”.</p> |
| <p>This EU approach to external conflict and crises covers “all stages of the cycle of conflict or other external crises; through early warning and preparedness, conflict prevention, crisis response and management to early recovery, stabilisation and peace-building in order to help countries get back on track towards sustainable long-term development”.</p> |
| <p>Effective utilization of conflict risk analysis and integration of conflict analysis in all foreign engagements from the very beginning.</p> |
| <p>Early warning “needs to be further strengthened within the EU, by better integrating existing early warning capacities and outputs from all sources, including from Member States, and drawing more extensively upon field-based information from EU Delegations and civil society actors, in order to provide a more solid foundation for conflict risk analysis. Enhancing early warning will also enable the EU to work more effectively with partners regarding responsibility to protect and the protection of human rights”.</p> |

Table 2 EU goals in early warning and early response (Source: EEAS and European Commission. Addressing conflict prevention, peace-building and security issues under external cooperation instruments, November 2013)

Interestingly, the EU does not yet seem to have devised a strategy or specific policies for the use of technologies for conflict prevention and peacebuilding. This is even more surprising if we take a closer look at EU goals in relation to early warning and early response (see Table 2). Technological

Hal, ‘Technology for Peacebuilding’, 2013. For the purpose of this paper, however, we concentrate on the role technology might play in generating/sharing/accessing data, as we did not find sufficient evidence to warrant a solid analysis of other purposes, such as those mentioned above. In addition to these works, the literature on disaster/risk management has also informed our research. See for instance, Aitsi-Selmi, A., Murray, V., Wannous, C. et al. ‘Reflections on a Science and Technology agenda for 21st Century Disaster Risk Reduction’, *International Journal of Disaster Risk Science*, 7:1, 2013.

⁹⁷ Puig Larraui and Kahl, ‘Technology for peacebuilding’, 2013.

instruments that allow to anticipate the onset of violence would constitute a valuable contribution to early warning and early response and to ensure timely and sustainable interventions. Indeed, the Commission itself recommends the EU to “use new and existing EU early warning systems, including those of EU Member States, to identify emerging conflict and crisis risks, and identify possible mitigating actions.” The same is acknowledged by the UN: “accurate information; if accessed in time, verified, analysed, and shared with the right actors, has the potential to prevent violence or stop it from escalating”⁹⁸. Having technological instruments that are able to predict the outburst of conflicts and/or follow their developments in case prevention fails, would also be in line with the EU’s goal to apply a comprehensive approach to conflict. In fact, Information and Communication Technologies (ICTs) can contribute to monitoring all stages of conflict, to gathering information at all levels (local, national, regional and global) and to engaging all the players involved.

In the following sections, we show how relevant actors in the field of conflict prevention and peacebuilding have already applied technological tools in their programmes and how these technologies can respond to the EU’s objectives in conflict prevention and peacebuilding. In this report, we refer to technology as ICT, that is “the different types of hardware, software and systems that enable people to access, generate and share information”. This includes smartphones, tablets, PCs, their related applications (SMS, social media) and software. Dual-use technologies, such as Unmanned Aerial Systems (UAS) – commonly known as drones – and satellites also add to this category, for their role in collecting information remotely⁹⁹.

3.3.1 Smartphones, Pcs, Software and Big Data

Due to their functionalities and software, which enable the possibility to generate, collect and share data, smartphones, tablets and computers and related software are well suited for use as tools to achieve “situational awareness” in conflict-prone environments as they can allow individuals to act before the eruption of violence. Even though, to the best of our knowledge, the EU does not employ mobile phones or specific software and social media analysis tools to collect and analyse data, other institutions, such as the UN or the Kenyan authorities (see below) have already integrated some of these tools to prevent conflict and to build peace, especially, to provide timely intervention.

It is worth mentioning, for instance, that mobile phones and online applications are essential tools in Kenya’s early warning mechanism. The system is managed by the National Steering Committee on Peace Building and Conflict Management (NSC), within the office of the President. The NSC is the national unit known as Conflict Early Warning and Response Unit (CEWERU), subsumed to the regional Conflict Early Warning and Response Mechanism (CEWARN). At the national level, the network is composed of staff based at the NSC, while at the local level the network comprises peace and intelligence committees, CEWARN and CEWERU field monitors. Field information is collected through local networks but also from civil society organisations located in the area. The population

⁹⁸ UN. Peace and Security. <http://www.un.org/en/peacekeeping/operations/peace.shtml>

⁹⁹ *Ibid.*

can send peace and conflict alerts using an SMS (with location, phone number, and the peace or conflict issue) or the Amani 108 Online Reporter (using email, and social media such as Twitter and Facebook). When data is received from the field, analysts at NSC validate the new information by making phone calls to the units on the ground. The NSC is also working to add geographic information system (GIS) data to visualise maps of conflict situations¹⁰⁰.

As another example, the UN has integrated software to achieve a better situational awareness in conflicts. For example, since 2007, the United Nations Development Programme (UNDP) has run the Crisis and Recovery Mapping and Analysis project (CRMA) to map threats and risks affecting communities in six states of Sudan and South Sudan. CRMA personnel relies on a desktop software based on GIS technology, whose data are supplemented by communities' workshops aimed at collecting information on the population's threat perceptions¹⁰¹.

Given the centrality of data and the advantages of integrating them from various sources, scholars and practitioners have begun to discuss the role of 'Big Data for conflict prevention'. The concept of 'Big Data for development' first appeared in the title of a UN Global Pulse's White Paper in 2012¹⁰². Although a common definition has yet to be found, Big Data for conflict prevention refers to the deluge of new available data (generally from social media like Twitter, Facebook, Instagram, Youtube, etc.) that can be exploited to devise conflict prevention and peacebuilding actions¹⁰³. Optimism around the use of Big Data in conflict prevention and peacebuilding stems from three main factors: the volume of these highly granular data; an improved ability to collect and process them through machine learning; and finally their nature, which allows better real-time insights into what is happening and what people think about current events¹⁰⁴. Two notable examples of programs that have collected and analysed Big Data to gain insights from conflict include: the Libya Crisis Map project, in which hundreds of volunteers collected, cleaned and coded data extrapolated from social media at the dawn of the Libya crisis¹⁰⁵; and the UN Global Pulse's project in Indonesia, which investigates public perceptions about food and fuel prices through Twitter¹⁰⁶.

3.3.2 Unmanned Aerial Systems (UAS)¹⁰⁷

¹⁰⁰ Francesco Mancini, ed., "New Technology and the Prevention of Violence and Conflict," New York: International Peace Institute, April 2013. Online Available https://www.ipinst.org/wp-content/uploads/publications/ipi_epub_new_technology_final.pdf.

¹⁰¹ *Ibid.*

¹⁰² *Ibid.*

¹⁰³ Helena Puig Larrauri, Anne Kahl, *Technology for peacebuilding*, International Journal for Stability and Development, 2013, Online Available <http://www.stabilityjournal.org/articles/10.5334/sta.cv/>.

¹⁰⁴ Sheldon Himelfarb, *Can Big Data Stop Wars Before They Happen?*, Foreign Policy, April 2013, <http://foreignpolicy.com/2014/04/25/can-big-data-stop-wars-before-they-happen/>.

¹⁰⁵ Helena Puig Larrauri, Anne Kahl, *Technology for peacebuilding*, International Journal for Stability and Development, 2013, Online Available <http://www.stabilityjournal.org/articles/10.5334/sta.cv/>.

¹⁰⁶ *Ibid.*

¹⁰⁷ UAS can also be armed (UCAS: Unmanned Aerial Combat Systems). To be clear, the International Civil Aviation Organization (ICAO) introduced Remotely-Piloted Aircraft (RPAS) as a subcategory of Unmanned Aerial Systems (UAS) but the scientific literature uses the term UAS since it embraces the entire category. UAS can be classified according to

Despite being commonly known for their use in combat, un-armed drones can be a valuable asset to conflict prevention and peacebuilding for data collection and sharing. When equipped with small cameras and recording devices they can¹⁰⁸: a) monitor people's movement, for examples those of smugglers and embargo breakers, relevant to timely intervention; b) carry out surveillance on population at risk; c) and help damage assessment in the framework of disaster risk reduction and search and rescue operations, assisting teams deployed on the ground. In line with the idea of a comprehensive approach using all instruments aimed at conflict prevention and due to this surveillance function, they can also help to monitor key crosscutting issues, particularly human rights, gender, and the protection of civilians. The advantages of such applications increase if we consider that UAS can ensure high endurance and be operational over a long time-horizon. In fact, even when UAS are piloted from operators on the ground, the alternation of pilots allows a continuous activity, which constitutes a great value, especially for long monitoring missions. Clearly, this allows the monitoring of the EU's surrounding regions, described as a priority in the EUGS (see section on European Union's goals in conflict prevention and peacebuilding).

Both the UN and the EU have already tested the value of such technology in peace operations and they appear to be willing to explore this path further¹⁰⁹. This acquires more relevance in view of the EU goal of strengthening partnerships with other relevant actors. It is worth mentioning the MONUSCO mission case (Democratic Republic of Congo – DRC, January 2013): a leading example that marked the first case of UAS use being explicitly authorised under a UN peacekeeping mandate, in order to provide real-time intelligence and help information gathering¹¹⁰. This episode was followed by a number of instances where UAS were deployed within the UN missions, collected in a recent report issued by the United Nations Office for Humanitarian Affairs in 2014. Just to mention a few examples, UAS were deployed in Timor-Leste in 2006, with the aim of helping the research and reintegration of IDPs (Internally Displaced Persons)¹¹¹, and within UNOSAT to survey progress in rebuilding following the 2010 earthquake in Haiti¹¹².

their features in terms of altitude and endurance. For our research, it suffices to say that MALE drone (Medium Altitude Long Endurance) reach an altitude of 15,000m with 14-24 hours endurance; HALE (High Altitude Long Endurance) drone fly up to 18,000m with 18-36 hours endurance. For a more detail discussion of UAS as a dual-use technology in peacebuilding and conflict prevention, see D.L. 2.4 of the EU-CIVCAP Project (forthcoming). This section is intended as a first overview the subject, with a view to evaluating member states capabilities in light of the EU's goals in peacebuilding and conflict prevention.

¹⁰⁸ Kalrsrud John and Rosén Frederik. "In the Eye of the Beholder? The UN and the Use of Drones to Protect Civilians" in *Stability, International Journal of Security & Development*, 2(2): 27, 1-10, 2013, <http://doi.org/10.5334/sta.bo>.

¹⁰⁹ European Commission, *Towards a European strategy for the development of civil applications of Remotely Piloted Aircraft Systems (RPAS)*, <http://register.consilium.europa.eu/doc/srv?l=EN&f=ST%2013438%202012%20INIT>.

¹¹⁰ John Kalrsrud and Frederik Rosén, "In the Eye of the Beholder? The UN and the Use of Drones to Protect Civilians", in *Stability, International Journal of Security & Development*, 2(2): 27, 1-10, 2013. <http://doi.org/10.5334/sta.bo>.

¹¹¹ Larrauri Helena Puig, and Patrick Meier, "Peacekeepers in the Sky: The Use of Unmanned Unarmed Aerial Vehicles for Peacekeeping", *ICT4Peace Foundation*, Sept. 2015, <http://ict4peace.org/wp-content/uploads/2015/09/Peacekeepers-in-the-Sky1.pdf>.

¹¹² *Final Report of the Expert Panel on Technology and Innovation in UN Peacekeeping*, December 2014, p.56, http://reliefweb.int/sites/reliefweb.int/files/resources/download_9.pdf.

The European Union, for its part, has been supporting the development of drones since the 1990s and has, since then, adopted several documents to ensure a coordinated EU approach to civil UAS acknowledging the relevance of civilian applications of UAS, including humanitarian and rescue missions, conflict prevention and peace-keeping and post-conflict stabilisation¹¹³. Frontex has also looked into the use of drones to enhance surveillance over its maritime borders¹¹⁴. Moreover, drones could be incorporated, together with satellites, into the EUROSUR network, that is the information-exchange framework designed to improve the management of Europe's external borders¹¹⁵. Data show a few relevant circumstances of civilian applications of UAS within the EU context: the first dates back to EUFOR mission to Chad in 2008, where the Irish Army used UAS for routes clearance and for ensuring the visibility of the area of the operations¹¹⁶; secondly, for the damage assessment and the identification of displaced landmines after the heavy floods which hit the Balkans in May 2014¹¹⁷ and, more recently, for the purpose of border surveillance to monitor migrant routes in the Mediterranean Sea (EUNAVFOR MED) and in the EUNAVFOR Somalia operation (see below)¹¹⁸. The EU has also been exploring the potential of UAS as 'key elements' in the EU operations by maximising research and innovation efforts¹¹⁹. High-level workshops have been organised for this purpose: among them, the JRC Crisis Management Technology Laboratory-ECML, which hosts annual workshops to assess the maturity of crisis management technology, dealt in 2013 with Unmanned Aerial Vehicles for Rapid Aerial Mapping¹²⁰. Moreover, also the European Commission's DG ECHO has been supporting a project launched by three NGOs whose aim is to consolidate the knowledge of the use of drones, with a focus on humanitarian contexts¹²¹.

¹¹³Ulrich Karock, *Drones: engaging in debate and accountability*, Quick Policy insight, Directorate General for External Policies, Policy Dept., European Parliament, Online Available: http://www.europarl.europa.eu/meetdocs/2014_2019/documents/sede/dv/sede210915policyinsightdrones_/sede210915policyinsightdrones_en.pdf.

¹¹⁴Raluca Csernaton, *Defending Europe: dual use technologies and drone development in the European Union*, Royal Higher Institute for Defence, Brussels, September 2016, p 41.

¹¹⁵Eurosur relies on a network of National Coordination Centres (NCCs), one for each Member State, responsible for border control in a given Member State. NCC coordinates the border surveillance activities at national level and serves as a hub for the exchange of information, see <http://frontex.europa.eu/intelligence/eurosur/>.

¹¹⁶UN Security Council, *Report of the Secretary-General and High Representative for the Common Foreign and Security Policy of the European Union on the activities of the European Union military operation in Chad and the Central African Republic*, 23 April 2009, <http://www.securitycouncilreport.org/atf/cf/%7B65BF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/CAR%20S%202009%20214.pdf>.

¹¹⁷Larrauri Helena Puig, and Patrick Meier, "Peacekeepers in the Sky: The Use of Unmanned Unarmed Aerial Vehicles for Peacekeeping", ICT4Peace Foundation, Sept. 2015, <http://ict4peace.org/wp-content/uploads/2015/09/Peacekeepers-in-the-Sky1.pdf>.

¹¹⁸Bloomberg, 22 June 2015, EU to Deploy Drones, Warships Against Human Traffickers, <http://www.bloomberg.com/news/articles/2015-06-22/eu-to-deploy-drones-warships-against-mediterranean-traffickers>.

¹¹⁹European High-level Unmanned Aircraft Systems Conference, EDA, https://www.eda.europa.eu/docs/documents/Brochure_Unmanned_Aerial_Systems.

¹²⁰<http://lunar.jrc.it/critech/Events/4ECMLWorkshopUnmannedAerialSystems/tabid/106/Default.aspx>.

¹²¹Drones in Humanitarian Action, <http://drones.fsd.ch/>.

3.3.3 Satellite Systems¹²²

For their function in terms of Earth Observation (EO), radar and optical products, positioning, meteorological and data transmission¹²³, satellites images apprehended through reconnaissance satellites can be used for multi-purposes related to conflict prevention and peacebuilding operations. In particular, similar to UAS, observation through satellites can provide analysis, especially as concerns a) possible military activity, security surveillance, which includes border control, monitoring of global terrorism, piracy and costal analysis; b) humanitarian aid monitoring, through which is possible to initiate a response planning¹²⁴.

As a possible boost to its role in conflict prevention and peacebuilding, the EU has its own Satellite Centre (EU SatCen)¹²⁵, which is responsible for the provision of imagery and geospatial services, fundamental for the elaboration of the GEOINT – geospatial intelligence, whose basic principle is to organise and combine all the available data exploiting it in order to work on products that can be used by planners, emergency responders and decision makers¹²⁶. Currently, EU SatCen is executing three projects – Copernicus, Space Situational Awareness and RTDI activities – suitable for the development of new capabilities, among which Copernicus is the European Union Observation program that provides support to the EU’s external action¹²⁷.

In recent years, satellite imagery of fundamental importance was provided for the assistance and the conduct of conflict prevention and peacebuilding operations¹²⁸. In fact, in 2009 SatCen gave contributions to EUFOR Tchad/RCA, providing imagery through Copernicus that was used to monitor the situation of Internally Displaced Persons (IDPs) and to examine the need for natural resources in the areas where IDPs were located. Satellite maps were provided, also to the operation EUNAVFOR Somalia, in order to control infrastructures and activities at pirates’ bases for preventing eventual attacks. Another mission supported by SatCen in 2009 was EUMM Georgia, for which products for the monitoring of military activities, and movements of vehicles and military personnel were requested. SatCen provided a significant contribution, also to the response to the Haiti earthquake. This activity was not carried out within the framework of CSDP, but constituted an important example of EU External Action’s comprehensive approach, which involved key decisional and operational actors at EU level. In 2011, further missions and operations were supported like EUTM Uganda, EUFOR Althea and EUBAM Rafah, for which it produced maps covering their area of

¹²² An in-depth analysis, including the technical and policy implications of the use of satellite systems in peacebuilding and conflict prevention, will be made in D.L. 2.4 (forthcoming). This section is intended as a first overview the subject, with a view to evaluate member states capabilities in light of EU’s goals in peacebuilding and conflict prevention.

¹²³ GNext Project, D610.1, p. 59.

¹²⁴ EU Satellite Centre, <https://www.satcen.europa.eu>.

¹²⁵ The EU Satellite Centre is a partner in EU-CIVCAP Project and contributed to this report.

¹²⁶ *Ibid.*

¹²⁷ Copernicus services fall into six main categories: land management, the marine environment, atmosphere, emergency response, security and climate change.

¹²⁸ GNext Project, D610.1, p. 59.

responsibility. In particular, EUFOR Libya OHQ based in Rome required a close support during the first planning phase.

The EU SatCen has also collaborated with the UN for the Supervision Mission in Syria UNSMIS¹²⁹. In this case, satellites provided an example of how the EU has been implementing its goal of partnership between the EU with other actors. In addition to cooperation with the UN, satellite imagery is also included in agreements among Member States, in line with the goal of enhancing coordination to link their internal and external objectives. This also applies to Galileo and EGNOS, two programs of satellite navigation, which received initial funding also from EU Members States. Currently they are owned and funded by the European Union and managed by the European Commission¹³⁰.

Finally, space systems can also contribute to communications. Satellite communications (SatCom) are space-based communications critical for enabling both civilian and military missions in areas with limited infrastructure. Originally conceived for the military, they could contribute to the EU's goal of ensuring coordination among all relevant actors, which is still low in this field (one exception is the ATHENA-FIDUS (*Access on Theatres and European Nations for Allied forces – France Italian Dual Use Satellite*) between Italy and France¹³¹).

3.3.4 The “Dark Side of Technology”: Challenges to the Use of Technology in Conflict Prevention and Peacebuilding

Although this will be the subject of further investigation in deliverable 2.4 of this work package, it is important to highlight some of the challenges and unintended consequences technology might have when used in conflict situations.

First, the role that certain data, especially that from social networks or other related web sources, might play in future systems aimed at predicting and describing conflicts remains to be seen. It is still unclear whether the advent of this new source of information is likely to improve our

¹²⁹ GNext Project, D610.1, p. 60.

¹³⁰ *European Global Navigation Satellite System Agency*, <http://www.gsa.europa.eu/european-gnss/galileo/galileo-european-global-satellite-based-navigation-system>.

¹³⁰ *European Global Navigation Satellite System Agency*, <http://www.gsa.europa.eu/european-gnss/galileo/galileo-european-global-satellite-based-navigation-system>.

“I programmi europei di navigazione satellitare – Galileo e EGNOS”, *Autorità di Vigilanza del GNSS Europeo*, http://www.gsa.europa.eu/sites/default/files/eu_gnss_prog_leaflet4_it.pdf. Galileo is the Europe's Global Satellite Navigation System (GNSS), it provides significant implications for European services and users, among which critical emergency response-services benefit. EGNOS is a new program to enter into service by 2019, to comprise 30 satellites providing continuous coverage of the entire globe. That will assure complete and highly precise positioning data, also for those areas that present characteristics that pose an obstacle to the signal. EGNOS is the second program of satellite navigation that will provide specific precision and reliability for existing services, and also a malfunction signal that will allow the development of critical applications for security.

¹³¹ European Union Institute for Security Studies, *Space Security for Europe*, Report 29, July 2016, p. 50, http://www.iss.europa.eu/uploads/media/Report_29_Space_and_Security_online.pdf.

understanding of conflict dynamics¹³². More generally, this has to do with the ability of early warning systems and/or statistical models to predict the outbreak of conflicts and crises. As someone has put it “billions of dollars have been invested in developing sophisticated data banks and early warnings, we have to note that even the most expensive systems have shown a striking inability to forecast political events”¹³³. Statistical models are often fraught with spurious correlations, confusion between correlation and causation and other econometric pitfalls, so that our understanding of when and why is it going to happen is still wanting. Analyses are also subject to biases depending on who is generating them. If not properly managed and analysed, Big Data are not likely to solve these issues¹³⁴.

Second, unequal access to technology might lead to biases that could hamper the design of well-rounded intervention policies. For instance, if only a limited number of villages, provinces or regions within a war-torn state have access to appropriate tools (and internet connection) to share conflict-related information, this would possibly lead to misplaced intervention, favouring ‘better connected’ groups or communities, and possibly fuelling resentment towards conflict prevention and peacebuilding actors. This ‘digital divide’ might affect intervention activities at the local level, but it might also shape dynamics between international, national and local actors, according to who owns the best technology and how it is employed, typically undermining the efforts of poorer or “less technological” actors¹³⁵.

Third, technological tools might be used to facilitate the dissemination of ‘rumours’ inciting violence or the spread of pernicious propaganda. For example, during the June 2010 conflict in Kyrgyzstan, mobile technology, cell phones in particular, compounded an already complex situation and allowed the spread of negative propaganda and the rapid mobilisation of opposing parties¹³⁶. Against this background, conflict prevention and peacebuilding practitioners need to be able to discriminate between ‘good’ and ‘bad’ information and devise strategies to counter initiatives of sophisticated actors who skilfully sabotage information to gain the upper hand in conflict.

Fourth, another concern in relation to data and their use is privacy, and questions related to their ownership, access and sharing. Even though social media open-source collection can gather valuable insights into social phenomena, one should recall that most of the data are privately owned. Even if service providers like Facebook and Twitter were willing to share them, then other legal or ethical concerns would arise about which data might be shared with who and for what purpose¹³⁷. The

¹³² Helena Puig Larrauri and Anne Kahl, *Technology for peacebuilding*, International Journal for Stability and Development, 2013, Online Available <http://www.stabilityjournal.org/articles/10.5334/sta.cv/>.

¹³³ Francesco Mancini, ed., “New Technology and the Prevention of Violence and Conflict,” New York: International Peace Institute, April 2013. Online Available https://www.ipinst.org/wp-content/uploads/publications/ipi_epub_new_technology_final.pdf.

¹³⁴ Puig Larrauri and Kahl, *Technology for peacebuilding*, 2015.

¹³⁵ Francesco Mancini, ed., “New Technology and the Prevention of Violence and Conflict,” New York: International Peace Institute, April 2013. Online Available https://www.ipinst.org/wp-content/uploads/publications/ipi_epub_new_technology_final.pdf.

¹³⁶ *Ibid.*

¹³⁷ *Ibid.*

same can be said for data generated with complex ICT tools such as UAS and satellites. Even though the systems might be owned by Member States or the EU itself, it is unclear whether the data they can collect should be considered theirs when operating not within national borders. For instance, in a hypothetical conflict scenario, it is possible that some governments would not allow international organisations/other countries to collect data on what is happening on the field for fear of having their abuses exposed to the international community. In this situation, would the international organisation/other country use the technology at its disposal? If yes, on what legal and ethical basis? Hence, before heralding expensive procurement programmes to obtain these capabilities, actors should be aware of the unintended consequences and establish a common legal and normative framework for their use.

Fifth, security of data storage and transmission is destined to become a crucial issue as the number of devices connected to the internet will exponentially grow in the years to come and various actors will increasingly resort to sophisticated hacking techniques to breach systems containing valuable information. In this context, if the most up-to-date standards, procedures and technologies related to information security are not brought on-board while planning and conducting conflict prevention and peacebuilding activities, there is a risk that the negative consequences generated by the mishandling of data will offset the benefits derived from exploiting them.

Ultimately, even if Big Data can help forecast the onset of conflicts and new tools like phones, drones and satellites allow for better “situational awareness”, it remains to be seen whether this will engender better responses. As has been noted, “there is little point in investing in early warning systems if one then ignores the warning”¹³⁸. Indeed, having a better early warning/situational awareness does not coincide with action or better action. As a valid example, the Kenyan early warning system has produced over 10 years of data, which, nonetheless, analysts have not been able to process, thus making any in-depth analysis or accurate prediction impossible¹³⁹. This is a crucial element if we seek to gauge what the EU might be able to gain from the use of more sophisticated ICT tools in conflict prevention and peacebuilding. Even if the EU could use new technological instruments and combining a raft of data coming from a variety of sources, acting accordingly to prevent or resolve a crisis would still constitute the main challenge¹⁴⁰.

¹³⁸ *Ibid.*

¹³⁹ *Ibid.*

¹⁴⁰ The challenge of how to bridge the early-warning-early-response gap constitutes one of the four crosscutting themes of the EU-CIVCAP project, together with civil-military co-ordination, coordination between short term and long term approaches, and local ownership.

4. ASSESSING EU MEMBER STATES' CAPABILITIES

This part of the research narrows the focus down to four selected countries – namely Italy, France, Germany and Sweden – in order to map the capabilities available at Member State level and assess their contribution to pursue the EU's identified objectives in the domain of conflict prevention and peacebuilding¹⁴¹.

In 2009, the European Council on Foreign Relations classified the EU Member States into four categories: the professionals (Denmark, Sweden, Finland, Germany, the Netherlands and the United Kingdom); the strivers (Austria, Belgium, France, Ireland, Italy and Romania); the agnostics (Czech Republic, Hungary, Poland, Slovenia, Slovakia and Spain); and the indifferent (Bulgaria, Cyprus, Estonia, Greece, Luxemburg and Malta)¹⁴². The following four case studies present an overview and update of the first two categories.

4.1 Case Study: France

The current contribution of France to EU's conflict prevention and peacebuilding does not reflect French capacities. This is also in contrast to a significant military engagement of the country abroad. With reference to the country's contribution to EU missions and operations, France has traditionally been one of the most active, especially in operations located in Northern, Western and Central Africa¹⁴³. However, in the last few years France has progressively reduced its contribution to civilian CSDP missions (see also Figure 2). This choice is mainly due to the fact that, after the domestic terrorist attacks, France is increasingly focused on domestic security and the fight against terrorism, and CSDP missions are not considered – at least by the Ministry of Interior – as linked to internal security. The EU missions abroad could have a potential “return to internal security”, but it would appear that the French government has not considered it¹⁴⁴.

In terms of civilian personnel contribution to CSDP missions, France traditionally used to be among the main 2-3 contributing countries¹⁴⁵. Currently, France has 45 seconded staff, corresponding to 5.2% of all seconded staff (7th contributor among EU Member States, at the same level of the Netherlands), and 28 contracted staff (4th place with Finland). The population per seconded in thousands is 1,458.52 (24th position among the 28 Member States). Out of 45 seconded staff, 18 are deployed in Niger, 20 in Mali.

¹⁴¹ Options for pooling and sharing of these capabilities will be examined in deliverable 2.5 (forthcoming).

¹⁴² Daniel Korski and Richard Gowan, *Can the EU rebuild failing states? A review of EU Civilian Capacities*, 2009 available at <http://www.ecfr.eu/page/-/ECFR18 - Can the EU rebuild failing States - a Review of Europes Civilian Capacities.pdf>.

¹⁴³ IIS, *The Military Balance* 216, 9. 94.

¹⁴⁴ Interview, September, 29, 2016.

¹⁴⁵ Interview, September, 29, 2016.

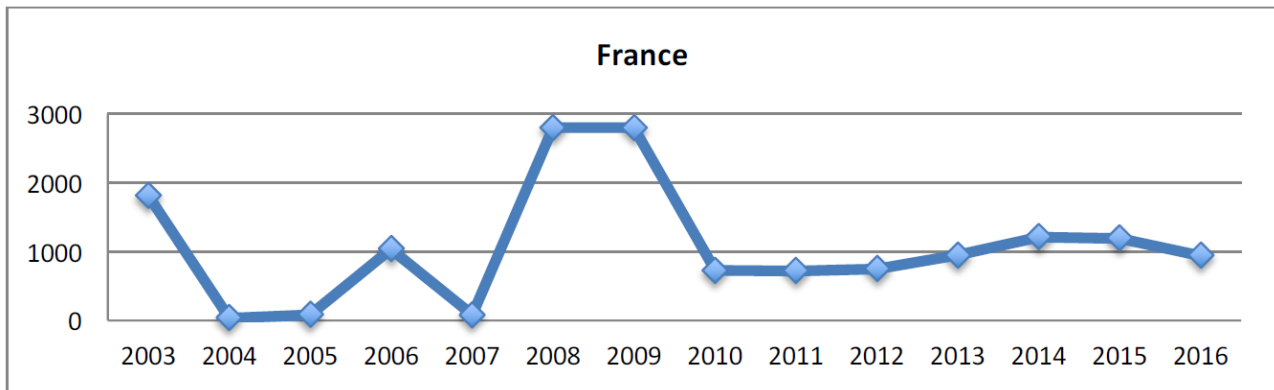


Figure 2 Total personnel trend in CSDP missions for France (source: Di Mauro, Krotz, Wright 2016)

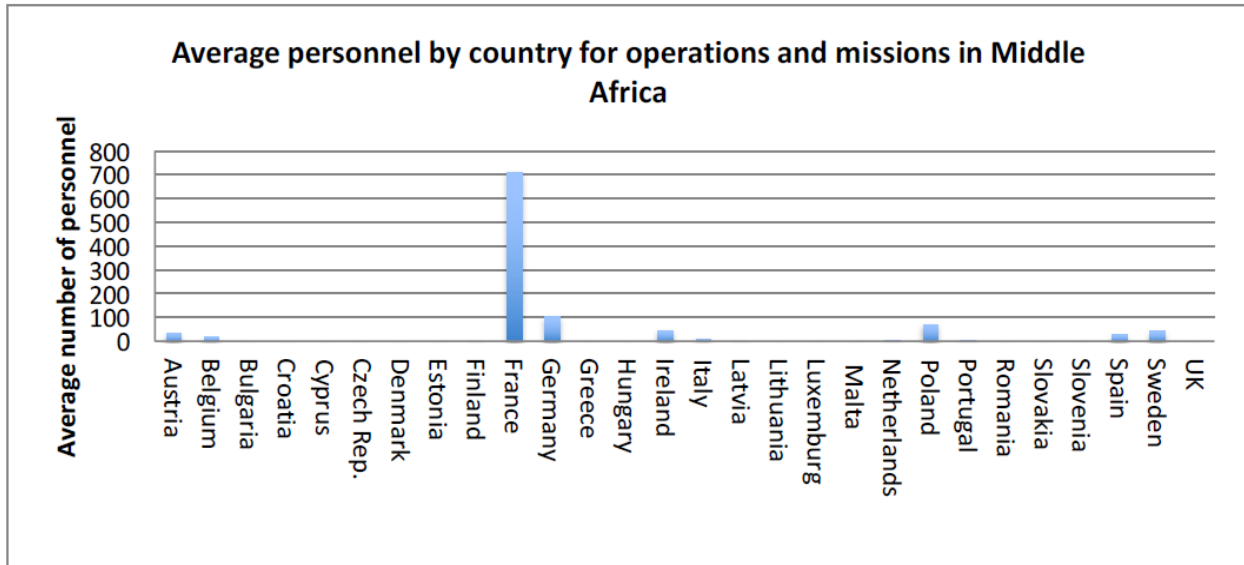
The most recent data show that France mainly invests in CSDP missions when they are deployed in the *francophone* regions. Significantly, as part of Operation Barkhane, France has 3,500 troops spread across five African countries (Mali, Mauritania, Burkina Faso, Niger and Chad)¹⁴⁶ and a good level of cooperation and information exchange has been developed between the EU missions and the French operation. Operation Barkhane has essentially provided potential security back-up to the two EUCAP Sahel missions, as requested by the EU. For instance, the French operation has offered to provide EUCAP Mali experts with security and accommodation in their advisory and evaluation outreach mission to Gao¹⁴⁷. These parallel deployments in the Sahel region seem to suggest that France considers the CSDP missions as less effective than national operations and with gaps to be filled, for instance, in relation to the mandates which are considered too ambitious and not focused on specific tasks¹⁴⁸.

The predominance of France in CSDP missions in the *francophone* regions is well illustrated by the figure below, which includes data for both civilian and military missions (see Figure 3). Going back to the EU's goals mentioned in section 2, this approach could have an impact in terms of EU credibility and legitimacy (as these missions are seen as mainly pursuing French interests in the region rather than EU interests) and local ownership (if local needs are not adequately taken into account when designing and implementing the missions).

¹⁴⁶ <http://www.defense.gouv.fr/operations/sahel/cartes/carte-operation-barkhane>.

¹⁴⁷ Interview, September, 29, 2016.

¹⁴⁸ Interview, September, 29, 2016.



Graphic 3 Average Personnel by country for operations and missions in Middle Africa (source: Di Mauro, Krotz, Wright 2016).

With reference to training, the French *EDA*¹⁴⁹ is part of the 11 organisations comprising the ENTRI group of training. In addition, the *Institut des hautes études de défense nationale* (IHEDN – Institute of Advanced Studies in National Defence) contributes with courses for military, police and civilian personnel as part of the Goalkeeper-Schoolmaster programme¹⁵⁰. Whilst the harmonisation and a good understanding of trainee needs are considered to be an added value of courses conducted within the EU framework, a perceived weakness is the overtly theoretical approach of many courses¹⁵¹. A positive example of a course with a more practical approach is the European Union Police Services Training (EUPFT), which combines a very hands-on, operational and theoretical training for EU police officers. This kind of approach could be usefully applied to civilian expertise at large so as to allow the EU to better adapt to challenges, and to turn the lessons-learned process from a conceptual to a more operational exercise.

Recruitment for CSDP missions is coordinated by the French Ministry of Foreign Affairs. A unique national roster or database does not exist, but internal databases have been developed within specific ministries (Internal Affairs, Defence, etc.). Seconded personnel are mainly from the public administration and a small part is hired as freelance (approx. 20%). The selection is mainly based on professional skills and linguistic abilities (which is highlighted as a limitation for some candidates, despite the fact that progress has been made in recent years). Debriefing is done at the individual level and not on a systematic basis. An interviewee considered civilian-military approach to SSR as one of the areas in which EU procedures and timing of recruitment are adequate. He argued that

¹⁴⁹ <http://www.ena.fr>.

¹⁵⁰ For instance, in November 2016 the *Institut* has organised a course for the management of international crisis, <https://goalkeeper.eas.europa.eu/course/details.do?id=14>.

¹⁵¹ Interview, September, 29, 2016.

this area provides the main added value for EU conflict prevention and peacebuilding, together with the joint approach on security and development ¹⁵².

Having a closer look at the categories of ICTs discussed in the previous section, France has the fifth largest budget worldwide devoted to space research, after the US, China, Russia and Japan¹⁵³. The country is the first in Europe to have launched autonomous space tools. Its space programme dates back to the mid-1980s, and has been developed following four directives, namely: Earth Observation (EO), telecommunication, Electronic-signals Intelligence (ELINT) and Early Warning (here “*alerte avancée*”, i.e. the application of a space system to identify the type and trajectory of missiles)¹⁵⁴. Despite having in place significant cooperation agreements in the field of EO, France’s investment in ICTs is also to favour a certain national autonomy in terms of capabilities (including for civilian purposes), and initially focused on purely defence purposes.

Currently, the country has one of the most comprehensive space programmes, especially as regards EO applications. France’s EO space system consists of two constellations with dual-use applications, called SPOT (*Satellites Pour l’Observation de la Terre or Earth-observing Satellites*) and Pléiades (Pléiades 1A and 1B). The SPOT programme, which has been offering high-resolution satellite imagery since the first launch in 1986, comprises seven payloads. SPOT 6 and SPOT 7 are the most recent, still in orbit, which will ensure continuity through 2024¹⁵⁵. In particular, Pleiades-1A has been designed for urgent tasks, so images can be requested of the system in under six hours. This function provides invaluable support where expedited collection of image is needed, for example in the case of crisis monitoring¹⁵⁶. For the purpose of our analysis, it is important to highlight that Pléiades is the French component (or so called ‘contributing mission’) of Copernicus Programme (see above)¹⁵⁷.

Moving on to the category of UAS, according to official data the country air force is equipped with four MALE drones (Harfang)¹⁵⁸, in operation since 2009, and five HALE drones (*Reapers or Predator*

¹⁵² Interview, September, 29, 2016.

¹⁵³ European Parliament, Policy Department DG External Policies, *Space, Sovereignty and European Security. Building European Capabilities in an Advanced Institutional Framework*, 2014, [http://www.europarl.europa.eu/RegData/etudes/etudes/join/2014/433750/EXPO-SEDE_ET\(2014\)433750_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/etudes/join/2014/433750/EXPO-SEDE_ET(2014)433750_EN.pdf) p.22.

¹⁵⁴ France is the only European country to possess such space-based early warning technologies, which comprised the two-satellite constellation of SPIRALE (SPIRALE Infrared Preparatory System for Alert) constellation, in orbit until 2011, which should be replaced in the near future. See European Parliament, Policy Department DG External Policies, *Space, Sovereignty and European Security. Building European Capabilities in an Advanced Institutional Framework, cit.*, p. 20.

¹⁵⁵ Airbus Defence and Space SPOT Satellite Imagery, <http://www.intelligence-airbusds.com/en/143-spot-satellite-imagery>.

¹⁵⁶ Satellite Imaging Corporation, Pleiades-1A Satellite Sensor, <http://www.satimagingcorp.com/satellite-sensors/pleiades-1/>.

¹⁵⁷ Copernicus is the European Union Observation program that provides support to the EU external action. There are around 30 existing or planned Contributing Missions. These include missions from ESA, their Member States, Eumetsat and other European and international third party mission operators that make some of their data available for Copernicus. See EU Satellite Centre, *Annual report 2015*, https://www.satcen.europa.eu/key_documents/GoodOne573450a9f9d71d2038efe735.pdf p. 14.

¹⁵⁸ MALE means Medium Altitude Long Endurance, HALE stands for High Altitude Long Endurance (see above, footnote 42).

B)¹⁵⁹. France's DGA defence procurement agency also says that it is planning to include additional assets to its fleet in the years 2014-2019, for a total of 19 aircrafts¹⁶⁰. They are deployed for surveillance missions and have been operating in the framework of operation Barkhane in Niger¹⁶¹.

Overall, it appears that the country makes no use of other ICTs platforms (computers/smartphones) in conflict prevention and peacebuilding. However, some French experts believe that such technologies can encourage people's involvement in the peace process and contribute to gain access to information, especially in those countries where media are often controlled and information channels are not independent¹⁶².

4.2 Case Study: Italy

Italy is among the main contributors to EU conflict prevention and peacebuilding, although some shortfalls are present in the training and recruitment systems. On the other hand, when deployed on the field, civilian and military capabilities have long worked in synergy and dual-use technologies have been exploited in the field of conflict prevention and peacebuilding, as explained below.

In terms of training and recruitment, Italy is among the main contributors to CSDP missions (see also Figure 4 for a temporal overview). As for civilian personnel, currently Italy contributes 49 seconded staff, 5.66% of all seconded staff (4th contributing country), 13 contracted staff (out of 455 contracted from Member States). The population per seconded in thousands is 1,218.07 (23rd position among the 28 Member States). Out of 49 seconded staff, 23 are deployed in Kosovo. Italy contributes to train CSDP civilian personnel through the Sant'Anna School of Advanced Studies that is part of the ENTRi system since the previous European Group of Training. The Italian Ministry of Foreign Affairs and International Cooperation has no specific internal courses and the same is the case for other ministries (e.g., Ministry of Justice and Ministry of Domestic Affairs)¹⁶³.

¹⁵⁹ IIIS, *The Military Balance 2016*, France, p. 99, Routledge, 2016.

¹⁶⁰ Beth Stevenson, "France orders third Reaper system", in *Flight Global*, 17 December 2015, <https://www.flightglobal.com/news/articles/france-orders-third-reaper-system-420169/>.

¹⁶¹ Craig Hoyle, "First French Reapers arrive in Africa", in *Flight Global*, 8 January 2014, <https://www.flightglobal.com/news/articles/first-french-reapers-arrive-in-africa-394655/>.

¹⁶² Interview, August 3, 2016.

¹⁶³ Military trainings are provided by Centro Alti Studi per la Difesa (CASD) and by CoESPU (Center of Excellence for Stability Police Units), the training institute of Carabinieri Corps (a Corp with dual role as a Police and Armed Force).

¹⁶³ Interview, September, 29, 2016.

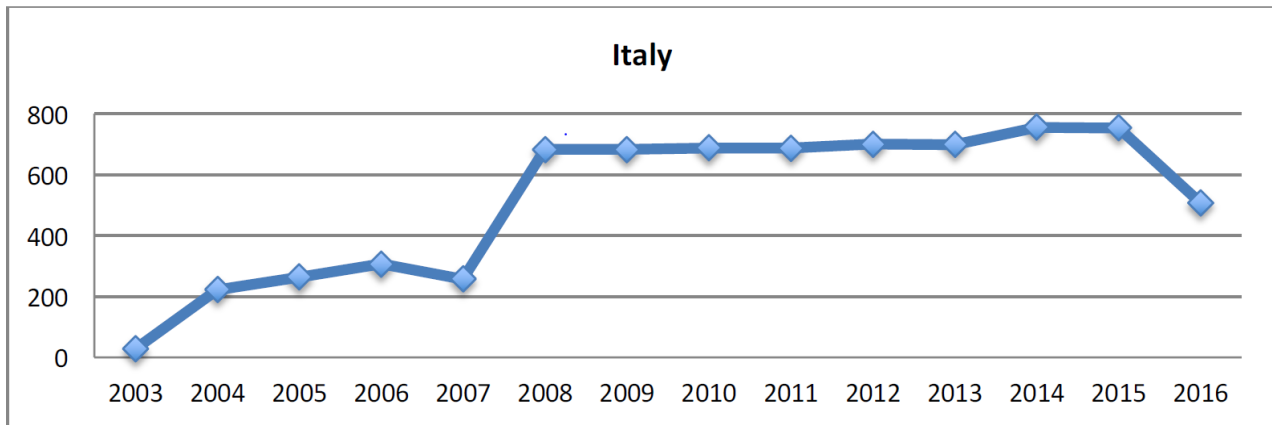


Figure 4 Total personnel trend in CSDP missions for Italy (source: Di Mauro, Krotz, Wright 2016)

The Ministry of Foreign Affairs (MFA) coordinates recruitment. The Ministry acts as a focal point and forwards open positions to other potentially interested ministries (Defence, Domestic Affairs, Finance, Justice and Transports). The MFA can nominate more than one person if there are several qualified candidates. Usually, the MFA receives a shortlist from the interested institutions and they present 3-4 candidates to the EEAS. As for France, selection is mainly based on previous international experience and with minor attention to previously attended courses¹⁶⁴.

The MFA has no database or roster. There was an MFA roster in the past, but it was not effective. Currently, the MFA advertises the most suitable vacancies on its website¹⁶⁵ and collects the candidatures for each position without storing the CVs for similar positions in the future. For each vacancy, the MFA can receive up to 30 candidatures from freelancers, the majority of them usually from practitioners who have already served in previous missions or have had similar experience and are well known to the officers. The MFA and other ministries have not a structured feedback loop and they collect feedback occasionally. In general, the desk does not work with large numbers; an officer compared his work to the activity of an artisan: good products and results, but on a small scale and without systematisation and standardisation¹⁶⁶. This approach has some limitations when it comes to achieving the EU's objectives of external coordination, standardisation and early warning mechanisms (at least for the selection of freelancers). Italian MFA has been one of the main supporters of the full operationalisation of the Goalkeeper system, seeing it as a useful tool for the improvement of coordination among Member States and quality of EU civilian interventions.

The range of applications of ICTs for the purpose of conflict prevention and peacebuilding is particularly evident in the Italian case. In fact, the Italian Navy deployed UAS within the context of its mission Mare Nostrum against the smuggling of migrants and to counter piracy in the framework

¹⁶⁴ Interview, September, 29, 2016.

¹⁶⁵ http://www.esteri.it/mae/it/ministero/servizi/italiani/opportunita/nella_ue/opportunitapespsd.html.

¹⁶⁶ Interview, September, 29, 2016.

of EU operations EUNAVFOR MED and EUNAVFOR Somalia¹⁶⁷. The deployment of UAS in this context marks the first time that the EU Naval Force has used them to patrol pirates as it otherwise relies on vessels and fixed wing aircraft. Italian UAS have monitored the IRCT – Internationally Recommended Transit Corridor of the Gulf of Aden, Bab el Mandeb Strait and over the Northern Somali coast. Overall, the Italian Air Force can count on a total of 12 systems¹⁶⁸, deployed essentially for surveillance and reconnaissance purposes, which can help ensure a timely intervention and are also essential to monitor the bordering areas of the EU¹⁶⁹. Data collected by the air force assets could also be available to the government’s internal and external security agencies.

Alongside France, Italy possesses one of the most advanced satellite systems among the EU Members States. The two countries, and Germany, are the main contributors to the EEAS by granting access to their imagery to the EU SatCen. As anticipated above, the main dual-use constellation is COSMO SkyMed (*COstellation of small Satellites for Mediterranean basin Observation*). Like Pléiades for France, COSMO SkyMed is the Italian component of the Copernicus programme since 2008. COSMO SkyMed is a four-satellite constellation, launched between 2007 and 2010, conceived as a dual-use programme to meet both civil and defence needs. COSMO SkyMed imagery provides support to missions such as surveillance, intelligence, damage assessment, risk management for natural disasters providing services to public users, from military to civilian, for security missions and to the enhancement of security. For instance, it was used to obtain data to support Italian troops in Afghanistan but also to monitor and fight the smuggling of migrants in the Mediterranean Sea.

Italy and France have also established a cooperation agreement for satellite communication called ATHENA-FIDUS (*Access on Theatres and European Nations for Alliedforces – France Italian Dual Use Satellite*)¹⁷⁰. This agreement represents an exception in a context where, overall, cooperation between Member States in satellite communications remains very low.

4.3 Case Study: Germany

In the context of EU conflict prevention and peacebuilding, Germany has been at the forefront of EU conflict prevention and peacebuilding from the beginning, since the 1999 Cologne Summit, which laid the foundations for the ESDP¹⁷¹. Currently, Germany is among the main contributors to EU conflict prevention and peacebuilding, at least in terms of training and personnel and has the potential to contribute more in terms of technology. In May 2004, the government approved the

¹⁶⁷ Marina Militare, *Operazioni Conclude: Mare Nostrum*, <http://www.marina.difesa.it/cosa-facciamo/operazioni-conclude/Pagine/mare-nostrum.aspx>.

¹⁶⁸ Six MALE drones (Predator A+) and six HALE (Predator B or Reaper).

¹⁶⁹ “I droni delle forze armate”, in *Start Magazine*, 2 June 2015, <http://www.startmag.it/tecnologia-innovazione/i-droni-delle-forze-armate/>.

¹⁷⁰ European Union Institute for Security Studies, *Space Security for Europe*, Report 29, *cit.*, p. 50.

¹⁷¹ Jens Behrendt, “Civilian Management in the EU: the German Experience”, in *L'Italia nelle missioni civili dell'UE. Criticità e Prospettive*, Quaderni IAI, 35/2010, http://www.iai.it/sites/default/files/quaderni_35.pdf.

Civilian Crisis Prevention Action Plan, which is in line with the main EU objectives in conflict prevention and peacebuilding: a comprehensive policy and activity framework for all civilian engagements in conflict and post-conflict environments, strengthening multilateral and domestic capacity, enhancing conduct capabilities, and providing the requisite human and material resources. In addition, “the Action Plan commits all government departments to embark on conflict-sensitive policies and to institute some coherence, particularly between the most involved ministries, such as foreign affairs, development, interior and defence”¹⁷². The ZIF¹⁷³ represents a real gateway for coordination, training and recruitment for peace operations. ZIF’s mandate is to strengthen the international capacity to respond to conflict and crisis by:

- recruiting, deploying and supporting civilian personnel for the peace/conflict operations of the UN, EU, OSCE, and possibly other bodies (UN system, NATO, German Foreign Office, *Gesellschaft für Technische Zusammenarbeit*);
- designing and conducting needs-driven training and induction;
- providing information and advisory services to parliament, ministries, expert communities, and the general public; and
- networking at the domestic and international levels.

In terms of contribution to the civilian personnel of CSDP missions, Germany contributes to CSDP missions through 124 seconded staff, the 14.32% of all seconded staff (1st contributing country with Poland), 18 contracted staff (out of 455 contracted from Member States). The population per secondee in thousands is 649.38 (22nd position among the 28 Member States). Out of 124 seconded staff, 72 are deployed in Kosovo. Figure 5 provides an overview of Germany’s contribution to CSDP missions and operations since 2003.

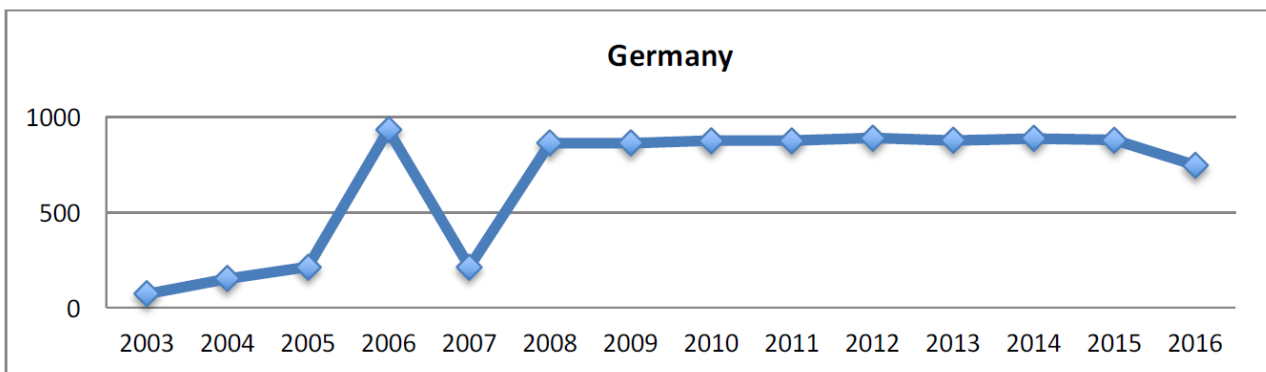


Figure 5 Total personnel trend in CSDP missions for Germany (source: Di Mauro, Krotz, Wright 2016)

¹⁷² Jens Behrendt, "Civilian Management in the EU: the German Experience", *cit.*, p. 94.

¹⁷³ See <http://www.zif-berlin.org/en.html>.

Concerning training, ZIF is part of the ENTRI group and it organises several training courses every year for German and international personnel. All training courses offer practical preparation for mission service, closely tailored to the needs and circumstances in the field¹⁷⁴. Since 2002, ZIF has trained over 2,500 experts in preparation for their work in civilian crisis management¹⁷⁵.

Regarding recruitment for CSDP missions, ZIF has developed an extensive civilian expert roster currently comprising over 1,000 members¹⁷⁶. In addition, “participation in a ZIF training course or equivalent training recognized by ZIF is mandatory, except for applicants with extensive mission experience or equivalent training with other institutions. Such candidates undergo a fast-track screening and selection process, including a personal interview”¹⁷⁷. ZIF also organises debriefings for returnees on a regular basis. The legal status and conditions of service for German civilian experts seconded to conflict prevention and peace operations through different organisations (EU, OSCE and UN) have been harmonised since 2009. German seconded personnel enjoy social security benefits, including pension, invalidity, and unemployment benefits¹⁷⁸. This approach represents a model for other Member States that the EU should emulate.

The case study on Germany concerning certain ICTs has produced poor results¹⁷⁹. It was however possible to collect the following findings closely related to satellites and UAS without reference to EU contribution, entirely based on desk research. Like France and Italy, Germany is one of the first EU countries to have developed its own satellite systems, originally for military application. The first satellite system in Germany was the so-called SAR¹⁸⁰ Lupe series: a constellation of five satellites for defence purposes, launched between 2006 and 2008. The defence SAR Lupe was followed by two SAR satellites for civil use: the TerraSAR-X which was launched in 2007 and the TerraSAR-X Add-On for Digital Evaluation Measurement, named TanDEM-X, launched in 2010. The two satellites provide data for land mapping and the monitoring and emergency response information and they contribute to the EU Copernicus programme. Among our case studies, Germany, France and Italy are among the few states granting the EU SatCen access to their satellite imagery: timely and accurate sources of information are essential for the EU to meet the objective of a timely intervention covering the EU neighbouring countries.

In terms of UAS capabilities, the German Air Force is equipped with a MALE drone (Heron) which is currently deployed within NATO Resolute Support operation; and in Mali in support of UN Multidimensional Integrated Stabilization Mission in Mali (MINUSMA) since July 2016. Germany is

¹⁷⁴ Jens Behrendt, "Civilian Management in the EU: the German Experience", *cit.*

¹⁷⁵ <http://www.zif-berlin.org/en/training.html>.

¹⁷⁶ <http://www.zif-berlin.org/en/recruitment/experts-in-missions.html>.

¹⁷⁷ Jens Behrendt, "Civilian Management in the EU: the German Experience", *cit.*, p. 98.

¹⁷⁸ Jens Behrendt, "Civilian Management in the EU: the German Experience", *cit.*

¹⁷⁹ Numerous attempts to set up interviews with German officials on the topic of technology and peacebuilding failed. Following formal requests through diplomatic channels, the German Ministry of Defense replied that it does not take part in EU civilian missions. It was impossible to reach them for further engagement or details. Citing workload issues within the Ministry, the German MFA declined the invitation to have an interview.

¹⁸⁰ SAR means Synthetic Aperture Radar (SAR).

also the leading country in the project for the development of a European MALE UAS (Medium-Altitude Long), an agreement signed in May 2015 that will be delivered by 2025¹⁸¹. An EU-owned drone would help fill the gaps of EU capabilities which, according to some experts, are not sufficient to meet Europe's needs in terms of security¹⁸².

To conclude, ZIF presents a model for the contribution to EU conflict prevention and peacebuilding, for its comprehensive approach, internal and external coordination and for the professionalisation of civilian capabilities. Unfortunately, the impossibility of further engaging with national officials only allowed for a limited assessment of the value of technology in conflict prevention and peacebuilding and Germany's contribution to the EU in this regard.

4.4 Case Study: Sweden

Sweden is one of the main contributors to the EU's conflict prevention and peacebuilding, especially if we consider data in relation to its population (see Figure 6 for an overview of CSDP deployments since 2003). In Sweden, the MFA regulates the availability and deployment of national capabilities to the EU's external action. The MFA has an annual budget that it allocates to the various agencies with a role in the foreign policy domain. The most important agencies dealing with conflict prevention and peacebuilding activities are said to be the Folke Bernadotte Academy (FBA) and the Swedish Civil Contingencies Agency or MSB (*Myndigheten för samhällsskydd och beredskap*)¹⁸³. The FBA functions as a platform for cooperation between Swedish governmental agencies and organisations and their international counterparts. Whereas strategic decisions concerning Sweden's involvement in EU missions are taken within the MFA, the agencies are responsible for implementing the operations. The MFA redacts steering documents that provide the framework within which the agencies operate, allowing the government to verify that the political objectives are reached.

Interviewed officials note that the Ministry is willing to support all missions, but tend to prioritise those where Sweden is likely to make a bigger contribution. Interviews also showed that Sweden contributes to EU civilian crisis management operations in a comprehensive manner, providing the EU with all sorts of capabilities related to mission support, including logistics, information communication systems, medical equipment and human resources management. The MSB is the main Swedish institution that equips and staffs EU missions. More specifically, on CSDP missions, Sweden is currently contributing to CSDP missions through 85 seconded staff, the 9.82% of all

¹⁸¹ MALE RPAS Programme Management Authorization approved, <http://www.occar.int/379>.

¹⁸² Tom Kington, and Pierre Tran, "European Ministers To Study MALE UAV Program", 19 May 2015, <http://www.defensenews.com/story/defense/air-space/isr/2015/05/18/european-defense-ministers-to-study-male-uav-program/27526023/>.

¹⁸³ Other agencies include the Swedish National Export Credits Guarantee Board, or *Exportkreditnämnden* (EKN), Swedish National Inspectorate of Strategic Products, Swedish National Board of Trade, or *Kommerskollegium*, Nordic Africa Institute (SWEDAC), Swedish Institute and Business Sweden.

seconded staff (3rd contributing country after Germany and Poland) and 12 contracted staff. The population per seconded in thousands is 112.42 (1st position among the 28 Member States).

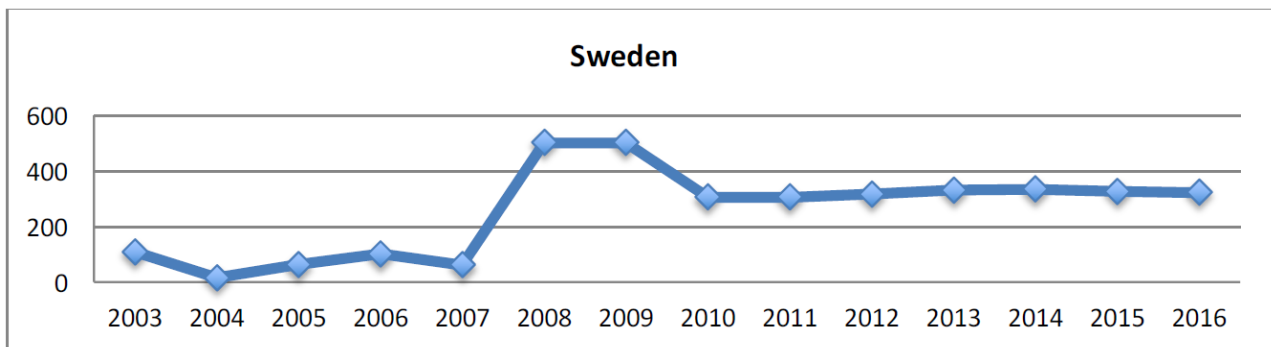


Figure 6 Total personnel trend in CSDP missions for Sweden (source: Di Mauro, Krotz, Wright 2016)

The FBA is responsible for both training and recruitment of civilian personnel and expertise for CSDP missions, but also for peace operations and election observation missions led by the AU, EU, UN and OSCE¹⁸⁴. Concerning training, the FBA is one of the most active and structured organisations of the ENTRI group and its approach is comprehensive and multifunctional, with several trainings involving civilian, police and military personnel. The FBA provides a wide range of pre-deployment and specialised training for practitioners in the field of conflict and crisis management. The length of the courses varies from 3 to 14 days. The trainings provided are comprehensive and robust and the FBA has also worked on timing: for instance, training for CSDP personnel does not take place until CPCC has sent notification of the accepted candidates. In fact, the FDA has worked widely on pre-deployment standards, an important objective for EU capabilities.

With regard to the recruitment mechanism of civilian personnel, “Sweden contributes to civilian crisis management operations by sending a wide range of personnel, including civilian experts and monitors, political advisers, police, judges, prosecutors, judicial experts, staff for operational support, and specialists in fields such as gender, human rights, and democratization”¹⁸⁵. A more limited responsibility for recruitment was transferred from the Swedish International Development Cooperation Agency (SIDA) to the Academy during 2007. More than one candidate can be nominated for the same post if there are several qualified candidates. After the respective agencies have selected personnel for nomination to the EU, the FBA facilitates communication with the CPCC. Sweden has a national roster with a view to improving the capacity to respond quickly to a broad range of requests from the government. In addition, shortlisted candidates undergo interviews on the basis of qualifications, experience and reference checking before being accepted in the roster. The minimum requirement to be accepted is to have relevant international experience. However,

¹⁸⁴ <https://fba.se/en/about-fba/>.

¹⁸⁵ Folke Bernadotte Academy, “Swedish contribution to Civilian Operations – Structures, Routines, and Experiences”, in *L'Italia nelle missioni civili dell'UE. Criticità e Prospettive*, Quaderni IAI, 35/2010, http://www.iai.it/sites/default/files/quaderni_35.pdf, p. 123.

exceptions can be made for particularly qualified candidates. The selected candidates are offered further competence development, based on their specialisation and needs¹⁸⁶. Seconded personnel are covered in terms of pension provision and insurance.

Concerning civil-military cooperation, civilian institutions in Brussels are reported to have looked at how the military has set up procedures in order to establish an EU mission. In the specific case of Sweden, the MSB gained experience in the establishment and execution of civilian operations due to its involvement in UN missions. Procedures within the EU are nevertheless often regarded as long and cumbersome. In particular, CONOPS/OPLAN documents are said to be too “heavy” (more than 1000 pages) and often subject to change. Although civil-military cooperation in the field is considered good, their mutual understanding should be enhanced: their activities are still seen as separate instead of complementing each other.

Concerning the use of technology, interviews show that it is somehow unclear or unknown how technology could help improve conflict prevention and peacebuilding. On one occasion, the interviewed officer asked to have info about the literature on technology and peacebuilding. Part of the problem might arise from definitional challenges. Indeed, interviews show a tendency to associate conflict prevention and peacebuilding activities with EU civilian crisis management operations, whereas the project adopts a wider and more comprehensive definition. People on the field are reported to use technology (especially cellphones and other devices) for communication and coordination, but it does not seem there is a national policy instructing the use of technology for conflict prevention and peacebuilding.

The use of satellites and drones in EU conflict prevention and peacebuilding activities has not been directly acknowledged by those interviewed, in the sense that interviewers seem unable to elaborate on the possibility of using this kind of technology for such tasks. However, desk research revealed that Sweden actually contributes its UAS to the Stabilization Mission in Mali (MINUSMA), for surveillance operations and occasionally for emergency intelligence missions¹⁸⁷. According to government officials, the Swedish capacity in terms of UAS is still developing and their assets (eight Shadow UAS)¹⁸⁸ will soon need to be replaced¹⁸⁹. As concerns satellite systems, Swedish space systems are equipped with six satellites whose mission is focused largely on the measurements of electrical and magnetic fields in the aurora region¹⁹⁰. As concerns EO, important cooperation agreements are in place between the country and France within SPOT and Pléiades systems¹⁹¹.

¹⁸⁶ *Ibid.*

¹⁸⁷ Beth Stevenson, “Swedish army evaluates Mali UAV deployment”, in *Flight Global*, 28 October 2015, <https://www.flightglobal.com/news/articles/swedish-army-evaluates-mali-uav-deployment-418264/>.

¹⁸⁸ RQ-7 Shadow UAS are small drone with a range of 125km and up to 8,000ft attitude.

¹⁸⁹ Beth Stevenson, “Swedish army evaluates Mali UAV deployment.Flight Global”, *cit.*

¹⁹⁰ Swedish National Spaceboard, *Swedish Satellites*, <http://www.snsb.se/en/Home/Space-Activities-in-Sweden/Satellites/>.

¹⁹¹ Swedish National Spaceboard, *International relations*, <http://www.snsb.se/en/Home/Space-Activities-in-Sweden/International-relations/>.

However, Sweden plans to reduce its participation in EO to focus on the launcher vehicles programme¹⁹².

When asked about the possibility of using technology in early warning systems, respondents noted that Sweden has an early warning mechanism in place, but it is unrelated to the one used by the EU. The MSB is not in charge of early warning and whether the agency should prioritise it in EU civilian operations is a political decision that does not relate to the planning and implementation of a mission. Nonetheless, EU institutions, in particular the Commission and the Council, have acknowledged that the EU should look at a common approach for developing this key future capability, with specific reference to early warning: it “needs to be further strengthened within the EU, by better integrating existing early warning capacities and outputs from all sources, including from Member States, and drawing more extensively upon field based information from EU Delegations and civil society actors”¹⁹³.

The interviewed officials underline that some of the infrastructures, such as generic IT systems, in addition to other equipment, are directly owned by the EEAS. Sweden might still provide some, but the EEAS, and specifically the CPCC¹⁹⁴, has increasingly acquired them, thus decreasing its dependency on Member States.

4.5 Case Studies Analysis

The analysis of these four case studies show a diversified involvement of Member States in terms of conflict prevention and peacebuilding. Germany and Sweden emerge as leading countries in this area, from the point of view of training, recruitment and deployment. Both have an excellent national architecture for conflict prevention and peacebuilding and they provide a strong support to the EU. In contrast, France and Italy are classified as ‘strivers’ and they need a more systematized approach of their contribution to EU’s conflict prevention and peacebuilding. In quantitative terms, Italy continues to be committed through civilian CSDP missions, while France has progressively reduced its contribution because the French government does not see the potential benefits for internal security of EU missions abroad. Consequently, France’s contribution seems disproportionate to its population and to the economic and political strength of the country. A risk highlighted by the case studies is that Member States invest in CSDP missions where they have historical ties, as in the case of France, contributing mainly to missions in the *francophone* regions. This approach could affect the credibility and reputation of EU conflict prevention and

¹⁹² The Swedish National Space Board’s long-term Strategy focused on 2011/2015, p. 3, available at http://www.snsb.se/Global/Strategi%20i%20eng%20sammanfattning%2020101115_2.pdf.

¹⁹³ Council of the European Union. Council conclusions on conflict prevention, June 2011.

¹⁹⁴ The Civilian Planning and Conduct Capability is the key body within the EEAS dealing with civilian crisis management, being it the Brussels-based permanent headquarter devoted to the planning and conduct of civilian missions. Created in 2007, the CPCC is headed by the Director and Civilian Operations Commander, who is essentially responsible for the operational planning, command and control of all the EU civilian missions.

peacebuilding. To avoid this problem, the EU could regulate the Member States’ role by introducing a maximum percentage (i.e. 15-20%) of national contribution in terms of personnel and resources to a single mission. This regulation could have a negative impact in terms of force generation, at least in a first phase, but could increase the credibility of the mission and a stronger commitment on the part of *all* EU Member States in the medium and long term.

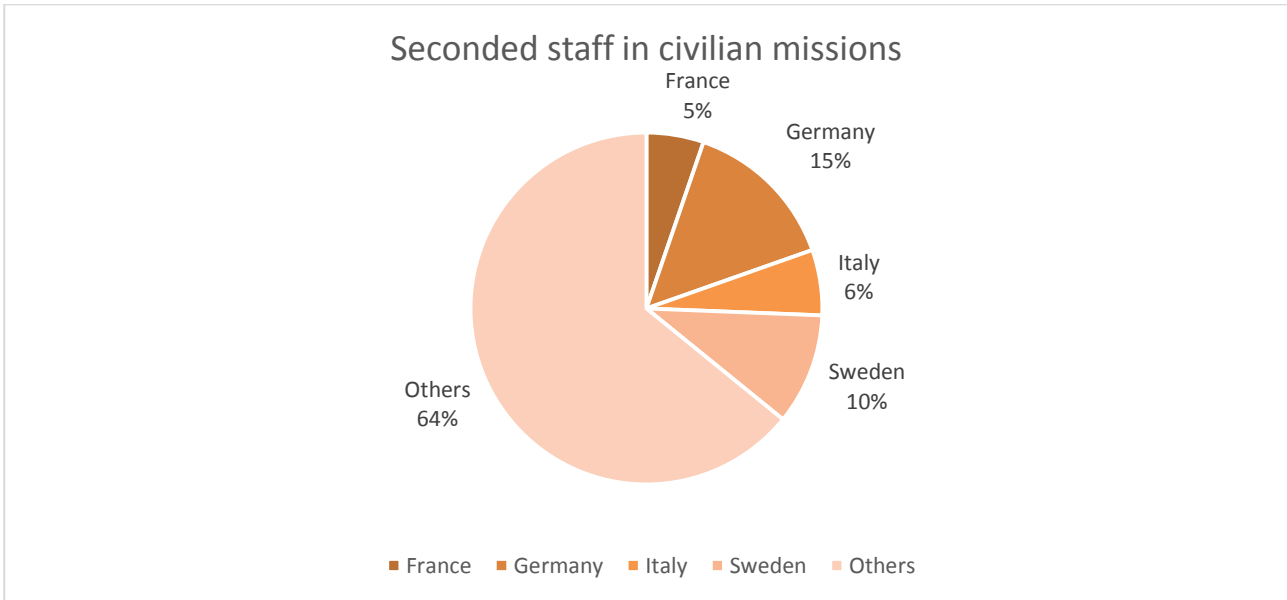


Figure 7 Personnel Figures of the Civilian CSDP Missions (31/08/2016), Source EEAS

The case studies also show that some Member States, like Germany and Sweden, provide high-level and integrated training courses before enrolling experts in their rosters. Other Member States, like France and Italy, have some valuable courses, but they are not connected to the selection process. The ZIF and the FBA combine both training and recruitment of civilian personnel and expertise for CSDP missions, and this direct connection has an impact both in terms of the effectiveness and quality of the personnel seconded. These organisations also work on other peace operations (e.g. led by the AU, UN or OSCE), which creates synergies and facilitates learning processes.

Concerning recruitment, the main challenge for Member States such as Italy and France is communication and coordination among ministries and other agencies. In fact, there is no single national roster or database, but internal databases have been developed within specific ministries (Internal Affairs, Defence, etc.). In addition, training courses are not considered a priority for these countries and this limits the standardisation of personnel. Also, the selection of freelancers remains limited and all these factors have consequences for the quality of the preselected personnel. Moreover, Italy and France are not debriefing the seconded personnel systematically and this is a limitation in terms of potential lessons learned.

For France and Italy, therefore, systematisation and standardisation of the procedures of recruitment – from the coordination among ministries to the debriefing of seconded personnel after the missions – needs improvement. The Goalkeeper system could represent a step forward in the right direction, but it needs to be supported by improvement in the micromanagement within each Member State. In addition, while Italy and Sweden are in favour, Germany and France have been showing resistance to its implementation in the last months. The position of France is due to the changed domestic scenario and to a minor engagement in CSDP missions. Germany used to support the system in the past, but currently is reluctant due to internal organizational reasons, but probably their position should be better clarified in the future.

| | National strategy on CCM | Specific institution to recruit and train | Specific roasters | In favour of Goalkeeper |
|---------|--------------------------|---|-------------------|-------------------------|
| France | | | | |
| Germany | ✓ | ✓ | ✓ | |
| Italy | | | | ✓ |
| Sweden | ✓ | ✓ | ✓ | ✓ |

Table 3 Matrix of the four case studies

Seconded personnel from Member States to EU’s institutions plays an important role for conflict prevention and peacebuilding. For instance, Finland and Sweden contributes to SECOPOL.2 through high-trained personnel and this is recognised by different stakeholders as an added value. In addition, Italy has invested in a seconded person working specifically on the Goalkeeper system in the last 6 years.

ZIF also remains a positive example both in terms of training and recruitment procedures. It represents a valuable model for need-driven training courses and inductions and for its large roster of civilian experts, but also for its ability to provide information and advisory services to political institutions and to the general public. Similarly, FBA functions efficiently as a platform for cooperation between Swedish governmental agencies and organisations and their international counterparts. Due to this comprehensive approach, ZIF and FBA are positive references not only to support CSDP missions, but also for other dimensions of the EU’s conflict prevention and peacebuilding capabilities (mediation, negotiation, training and mentoring for the European Commission and EU Delegations, etc.).

In terms of capabilities, the EU countries considered do have significant technologies that can be deployed to foster EU external action. This is particularly evident in the case of satellite systems and UAS, whilst ‘less complex’ systems such as phones, tablets, PCs and related applications and software were not particularly acknowledged during interviews as tools at the disposal of Member States for conflict prevention and peacebuilding.

However, and despite these pronounced capabilities, at the Member State level the overall knowledge on the possible use and impact of ICTs for conflict prevention and peacebuilding is still limited. With the exception of some interlocutors, when asked about the use of specific technological instruments, most of the interviewed officials declined to answer questions as they felt it was not in their competence or they were not familiar with the topic. Whereas they were eager to discuss ‘traditional’ capabilities (for instance personnel, logistics, infrastructures, medical equipment and human resources management), they did not seem to link to how certain technologies could buttress conflict prevention and peacebuilding activities. Hence, and despite having an intuition of how certain instruments might help (like the use of cellphones for better communications), respondents seemed unaware of how some technological tools could generally improve their endeavours. From an early assessment, there are three possible explanations for this gap:

- 1) The first explanation is related to a definitional challenge. Interviewees showed a tendency to associate conflict prevention and peacebuilding activities almost exclusively with civilian crisis management operations or humanitarian missions, rather than with early warning and other activities. In this sense, it is possible that the interviewed officers were not in the best position to speak about activities that were performed in other institutions/agencies within the government. In this regard, one might wonder how closely intertwined early warning and crisis management activities are at Member State level.
- 2) The second explanation relates to the possibility that data collected by ICTs are not being used for the specific purpose of early warning in the framework of conflict prevention and peacebuilding. In other words, it might be that the data generated with some kind of technologies such as satellites and drones are collected and employed almost exclusively for defence or intelligence purposes, and not for other activities that would require “situational awareness” tools such as conflict prevention and peacebuilding. Although this hypothesis would need to be verified, it is plausible to think that, by having departments or agencies working in “silos” rather than in an integrated manner, countries use the data generated by complex and sophisticated technologies to reach national security objectives. This hypothesis was indirectly confirmed by an informal talk with an expert who warned about the use of drones and satellites for conflict prevention and peacebuilding as these technologies are more often associated with the defence and intelligence sectors rather than with the development one. If this holds true, however, one should note that if these technologies are *dual-use*, so are “items, including software and technology, which can be used for both civil and military purposes (...)” by definition they perform a task regardless of the purpose they serve. Enhanced synergies between defence/intelligence and civilian capabilities would significantly improve performance in conflict prevention and peacebuilding and this might include the exploitation of new R&D programs being implemented at European level. Indeed, as emerged from the country studies, while the EU can count on Member States with advanced technology, at “the national level there are

often different agendas and technological priorities, different standards and national requirements.” In the Implementation Roadmap of the December 2013 European Council conclusions, the European Commission recognised that capability development is of prime responsibility of the EU Member States and the European Defence Agency (EDA), but it also stated that it “can make an important contribution, in line with its competencies in the field of non-military security (e.g. counter-terrorism, protection of external borders, maritime surveillance and civil protection).”¹⁹⁵

- 3) The third explanation, closely linked to the second, regards the prioritisation of countries’ specific goals in foreign and security policy. If the premium objective of a country is defence and/or intelligence, it will likely use the resources at its disposal to support what it conceives as its priority, which might not necessarily be conflict prevention and peacebuilding activities.

Having identified the EU’s goals and the technological tools Member States have at their disposal, it is possible to derive some general considerations about the EU’s capabilities in conflict prevention and peacebuilding.¹⁹⁶ Section 3.3 of this report noted that ICT tools are promising instruments in conflict prevention and peacebuilding due to their ability to generate, access and share data, which, in turn, might be of help in predicting, describing and diagnosing conflict. The use of technological tools would thus help the EU to strengthen its early warning system in order to swiftly assess crises, provide a more solid foundation for conflict analysis and obtain situational awareness. However, when it comes to the use of data and technology for conflict prevention and peacebuilding purposes, two issues should be considered: the first relates to the willingness of Member States to share data, while the second refers to the methodology of the EU’s early warning system.

Interviews seemed to suggest that Member States do not necessarily share the data they collect with the EU early warning system. In the specific case of Sweden, for instance, respondents noted that the country does have an early warning mechanism in place, but it is somewhat unrelated to the EU one. One possible explanation is that, whereas one institution might consider a piece of data useful to feed into an early warning mechanism, another institution might consider it as something to be analysed and treated to produce “intelligence information.” Henceforth, as problems related to intelligence sharing in the EU are well known¹⁹⁷, a Member State official might be unwilling to send the collected data to Brussels, despite its possible relevance for conflict prevention and peacebuilding. This constitutes a key area for improvement.

¹⁹⁵ Report from the commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions a New Deal for European Defence Implementation Roadmap for Communication COM (2013) 542; Towards a more competitive and efficient defence and security sector, p 2.4. In this context, it is worthy to underline the promising role of the Preparatory Action on CSDP (PA CSDP), which complements the CSDP-related civilian research already financed by H2020 by covering the CSDP-related defence research. This will benefit EU Member States capability development for the purpose of external actions, and hopefully could also enhance the resources to be applied in Peacebuilding and conflict prevention.

¹⁹⁶ For further reference see D.L. 3.1, 3.2, 4.1, 4.3 and 5.1.

¹⁹⁷ http://www.iss.europa.eu/uploads/media/Brief_8_EU_Intelligence_Cooperation.pdf.

A second challenge is related to the methodology of the EU early warning mechanism currently in place¹⁹⁸. The current system consists of four steps: in the first stage, the combination of a quantitative index¹⁹⁹ and qualitative inputs by the EU staff and country experts assesses the deterioration of conflict-prone situations; in the second phase, the mechanisms pinpoint countries at risk that need further analysis or action for prevention. Measures are then discussed within the EU with further inputs from the Member States; in the third phase, information by personnel on the field and at the headquarters is merged into a unique analysis, setting preventive and peacebuilding measures; the final step consists of the evaluation of the attained objectives.²⁰⁰ With the methodology currently in place, it is thus not clear when data collected from Member States might feed into the mechanism. Let us suppose that a Member State would be willing to provide imagery about a conflict-prone situation collected with drones or satellites: at which stage would it be included in the EU early warning mechanism? Interestingly, this would also apply to the data collected by the EU. As a valid example, it seems that SatCen has provided satellite imagery to EU missions in the field rather than to its early warning mechanism in Brussels.

In explaining the rationale for why the EU mechanism should not foresee inputs from the considered technologies, one could argue that the data they collect would be more useful to provide “situational awareness” during conflict, rather than to prevent it. Nevertheless, such an argumentation would be shortsighted and would not take into account the added value that the integration of complex ICTs could bring to a comprehensive early warning/situational awareness system aimed at signalling the different degrees of the likelihood of a conflict. Integrating all data coming from various sources would enable the EU mechanism to gradually ‘zero-in’ on a country at risk.

A system that monitors a country by analysing its quantitative macro indicators first, and is then able to gradually and deliver more granular information in a timely manner – for example thanks to data coming from satellites, drones and social networks – as soon as a crisis unfolds, would potentially better serve EU’s objectives. Regardless of economic and technical issues related to the establishment of such a wide-ranging early warning/situational awareness system, which of course have to be kept in mind, a mechanism of this type would be best equipped to meet the EU’s heralded goals of swiftly assessing and responding to crises.

¹⁹⁸ According to EEAS, early warning is “about systematically providing the right information to the right people at the right time – connecting the dots across relevant actors in the field and at headquarters.

http://eeas.europa.eu/cfsp/conflict_prevention/docs/201409_factsheet_conflict_earth_warning_en.pdf .

¹⁹⁹ The so called “Global Conflict Risk Index” developed by the Joint Research Centre

<http://conflictrisk.jrc.ec.europa.eu/>.

²⁰⁰EEAS Website.

http://eeas.europa.eu/archives/docs/cfsp/conflict_prevention/docs/201409_factsheet_conflict_earth_warning_en.pdf.

5. CONCLUSIONS AND RECOMMENDATIONS

Comparing the EU's objectives on conflict prevention and peacebuilding to the resources available at the EU and Member State levels has led to different results in terms of personnel, procedures and technology.

Personnel and procedures have significantly improved in recent years. Yet, to fulfil its objectives, the EU needs to work more in specific areas. The EU's instruments for conflict prevention and peacebuilding are in place, but they need to grow in terms of practical coordination. Member States could play a key role in both endorsing a better coordination and standardisation of training programmes and producing well-prepared personnel for conflict prevention and peacebuilding to be seconded to EU institutions and CSDP missions.

The benefits of integrating ICT tools such as mobile phones, tablets, drones and satellites have been recognised by both practitioners and academics. In the context of its comprehensive approach, integrating various instruments can be particularly beneficial in creating a comprehensive EU early warning/situational awareness system, in order to anticipate, describe and diagnose conflicts²⁰¹. Nevertheless, the multiple challenges (what we have referred to as the "dark side" of technology) that emerged from the literature confirm the risk of lionising technology as the solution, rather than a tool, to solve conflict prevention and peacebuilding issues. In particular, a more efficient system that would better predict or describe conflicts would do little if what follows is inaction. ICT and other new instruments should complement, rather than substitute, other traditional forms of intervention such as preventive diplomacy, governance reforms and economic initiatives to have a greater chance of achieving enduring results. Against this background, it is possible to put forward some specific policy recommendations:

- 1. The EU needs coherent political strategies that start with all relevant players sharing a common understanding of the situation or challenge at stake.**

The EU should devise mechanisms to ensure that all actors (and related departments) that can contribute to different stages of a conflict do not work separately but in a coordinated manner. In line with the comprehensive approach, conflict prevention should not be conceived as isolated, but as a continuum of activities covering various stages of the life cycle of conflicts (from rising tensions to the outbreak of conflict to post-crisis stabilisation), including the various actors involved and also

²⁰¹ In light of EU goals and the literature found, this research argues that technology can be a particular added value to anticipate and describe a conflict. Nonetheless, a promising research area would be to understand how technology might strengthen EU external action when civilian crisis management operations are initiated and conducted. In this regard, a project funded under the H2020 framework is currently investigating how information systems can be used for three different purposes when properly employed in missions: situational awareness, information exchange and command and control. The results of this project will be made available in May 2017: see <http://civilex.eu/>.

the instruments at its disposal. The EU should ask Member States to contribute through standardised processes to the comprehensive approach and with high-quality personnel.

- 2. The EU needs to improve the training system in two directions: first, to request and support context-based pre-deployment training for all personnel in CSDP missions; second, to coordinate with Member States for more specialised courses and for ‘qualitatively relevant’ seconded personnel in conflict prevention and peacebuilding-related positions.**

In terms of training, ENTRi has improved the training system for peace operations, in particular in terms of standardisation and in addressing specific civilian expertise (i.e. rule of law, SSR, DDR). Nevertheless, the consideration of aspects of local ownership and a deeper understanding of the specific context where the personnel will operate – including a knowledge of local culture, history and traditions – should be reinforced. Synergies among civilian, military and police components could be improved, also through joint practical exercises. EU training policies need to be revised, standardisation improved and financial resources increased. Finally, de-briefing activities should be strengthened. Highly trained personnel in conflict prevention and peacebuilding should also be seconded by Member States to EU institutions to strengthen the EU’s capabilities in this area.

- 3. The EU needs to fully implement the Goalkeeper system and to support Member States to implement recruitment models based on those developed by the most effective countries (e.g. Germany and Sweden).**

Concerning recruitment, the systems used by the Member States are heterogeneous and many of them present some gaps (i.e. the selection of personnel with limited specific competences or with weak language skills), with negative impact on the work of the missions. The full implementation of the Goalkeeper system duly supported by Member States could considerably facilitate the civilian capability development process. In both training and recruitment, Germany and Sweden represent positive models for other Member States and for EU standardisation.

- 4. The EU needs to raise awareness within European and Member States’ institutions of the possibilities provided by ICT in conflict prevention and peacebuilding.**

Timely and precise information is essential for supporting conflict prevention and peacebuilding goals and activities. With reference to the EU’s conflict prevention and peacebuilding goals, the analysis of the official documents maintained that the EU should try to prevent conflicts before their eruption and, as such, early warning constitutes an essential tool. The literature review revealed that ICTs could offer a valuable addition to conflict prevention and peacebuilding activities, in particular due to their ability to generate, collect and share conflict-related data that might feed an advanced early warning system. However, not all the interviewed actors at national level seemed aware of the added value that ICTs can potentially provide to the EU. Therefore, it would be crucial

for the EU to promote a better understanding of the possible contribution of technologies in conflict prevention and peacebuilding both at national level and in Brussels.

- 5. The EU should integrate and analyse data that are generated by various ICT systems and collected from different sources, hence establishing a comprehensive early warning/situational awareness system to gain a better understanding of conflict dynamics.**

Integrating all data generated from various sources such as smartphones, PCs, drones and satellites would enable the EU's mechanism to gradually zero-in on a country at risk. A system that monitors a country by analysing its quantitative macro indicators first, and then is able to gradually deliver more granular information as soon as a crisis unfolds, would potentially better serve the EU's objectives and possibly address the early warning-response gap which still plagues EU conflict prevention and peacebuilding.

- 6. The EU should strengthen civilian defence/intelligence synergies in conflict prevention and peacebuilding with specific reference to early warning/situational awareness between EU and national institutions.**

The empirical findings from the interviews suggested that data collected by ICTs technologies at national level was being used almost exclusively for defence or intelligence purposes, and not for other activities such as conflict prevention and peacebuilding. EU Member States are currently deploying their ICTs in the framework of either national or EU actions, but cooperation among them and within the EU is still limited. The EU should therefore make sure to coordinate early warning/situational awareness processes in Brussels and at Member State level in order to share a common understanding when a challenging situation is emerging.

BIBLIOGRAPHY

- Airbus Defence and Space SPOT Satellite Imagery, 2016. Online Available: <http://www.intelligence-airbusds.com/en/143-spot-satellite-imagery> (accessed 28 November 2016).
- Aitsi-Selmi, A., Murray, V., Wannous, C. et al., 'Reflections on a Science and Technology agenda for 21st Century Disaster Risk Reduction', *International Journal of Disaster Risk Science*, 7:1, 2013.
- Autorità di Vigilanza del GNSS Europeo. "I programmi europei di navigazione satellitare – Galileo e EGNOS", 2016. Online available: http://www.gsa.europa.eu/sites/default/files/eu_gnss_prog_leaflet4_it.pdf. (accessed 28 November 2016).
- Azzoni, Alessandro and Pirozzi, Nicoletta (eds), *Civili in missione: l'esperienza italiana nelle missioni dell'Unione europea*. 2016. Online Available: http://www.iai.it/sites/default/files/civili_in_missione.pdf (accessed 28 November 2016).
- Behrendt, Jens "Civilian Management in the EU: the German Experience", in *L'Italia nelle missioni civili dell'UE. Criticità e Prospettive*, Quaderni IAI, 35/2010. Online Available: http://www.iai.it/sites/default/files/quaderni_35.pdf (accessed 28 November 2016).
- Bloomberg, EU to Deploy Drones, Warships Against Human Traffickers, 22 June 2015, Online Available: <http://www.bloomberg.com/news/articles/2015-06-22/eu-to-deploy-drones-warships-against-mediterranean-traffickers> (accessed 28 November 2016).
- Cossu, Marco, "I droni delle forze armate", in *Start Magazine*, 2 June 2015, <http://www.startmag.it/tecnologia-innovazione/i-droni-delle-forze-armate/> (accessed 28 November 2016).
- Council of the European Union. Civilian Headline Goal 2008, December 2004.
- Council of the European Union. Draft EU Training Concept in ESDP, December 2004. Online Available: https://eeas.europa.eu/csdp/documents/pdf/trainingconcept_en.pdf.
- Council of the European Union. Recommendations for Enhancing Co-operation with Non-Governmental Organisations (NGOs) and Civil Society Organisations (CSOs) in the Framework of EU Civilian Crisis Management and Conflict Prevention. November 2006.
- Council of the European Union. Concept on Strengthening EU Mediation and Dialogue Capacities, November 2009.
- Council of the European Union. Internal security strategy for the European Union Towards a European security model, March 2010.

Council of the European Union. Council conclusions on conflict prevention, June 2011.

Council of the European Union. Multi-annual Civilian Capability Development Plan: Action Lines for 2012-2013, July 2012.

Council of the European Union. Third report on Member States' progress in facilitating the deployment of civilian personnel to CSDP missions, July 2013.

Council of the European Union. Council conclusions on Common Security and Defence Policy, November 2013.

Council of the European Union, Implementation Plan on Security and Defence, 14 November 2016.

Online Available:

https://eeas.europa.eu/sites/eeas/files/eugs_implementation_plan_st14392.en16_0.pdf
(accessed 28 November 2016).

CPCC. Force generation for the Civilian CSDP Missions: A planning guide for Member States Seconding Authorities, September 2016. Online Available:

<https://www.lyyti.fi/att/845AC0/86045F98A9719c50957dFB2F1Fc0F5869aa722F94FAc9EBf92c0C57> (accessed 28 November 2016).

Csernaton, Raluca, *Defending Europe: dual use technologies and drone development in the European Union*, Royal Higher Institute for Defence, Brussels, September 2016.

de Guttry, Andrea 'Le missioni civili dell'Unione europea: le sfide per la formazione ed il reclutamento', in Azzoni, Alessandro, Pirozzi, Nicoletta (eds.), *Civili in missione: l'esperienza italiana nelle missioni dell'Unione europea*, 2016, pp. 45-55, Online Available:

http://www.iai.it/sites/default/files/civili_in_missione.pdf (accessed 28 November 2016).

Drones in Humanitarian Action, 2016. Online Available: <http://drones.fsd.ch/> (accessed 28 November 2016).

EDA. European High-level Unmanned Aircraft Systems Conference. Online Available:

https://www.eda.europa.eu/docs/documents/Brochure_Unmaned_Aerial_Systems (accessed 28 November 2016).

EEAS. EU Conflict Early Warning System, Factsheet, September 2014. Online Available:

http://eeas.europa.eu/archives/docs/cfsp/conflict_prevention/docs/201409_factsheet_conflict_earth_warning_en.pdf (accessed 28 November 2016).

EEAS. Conflict Prevention, Peace building and Mediation, 2016, Online Available:

https://eeas.europa.eu/topics/crisis-response/426/conflict-prevention-peace-building-and-mediation_en (accessed 28 November 2016).

EEAS. Crisis response, 2016. Online Available: http://eeas.europa.eu/crisis-response/what-we-do/crisis-platform/index_en.htm (accessed 28 November 2016).

EEAS. CSDP structure, instruments, and agencies, 2016. Online Available: http://eeas.europa.eu/csdp/structures-instruments-agencies/trainings/index_en.htm (accessed 28 November 2016).

EEAS. Latest vacancies, 2016. Online available: http://eeas.europa.eu/headquarters/headquarters-homepage/search/site_en/?f%5B0%5D=bundle%3Aeeas_job_vacancy&f%5B1%5D=im_field_er_thematics%3A285 (accessed 28 November 2016).

EEAS and European Commission. Addressing conflict prevention, peace-building and security issues under external cooperation instruments, November 2013.

EU Satellite Centre. Annual report 2015, December 2015. Online Available: https://www.satcen.europa.eu/key_documents/GoodOne573450a9f9d71d2038efe735.pdf (accessed 28 November 2016).

EU-CIVCAP Report. DL4.1, Hylke Dijkstra, Petar Petrov, and Ewa Mahr (2016), “Reacting to Conflict: Civilian Capabilities in the EU, UN and OSCE”. Online Available: http://www.eu-civcap.net/files/2016/11/Reacting_Conflict-Civilian_Capabilities_EU_UN_OSCE.pdf (accessed 28 November 2016).

EU-CIVCAP. DL 3.1 *Report on technological shortcomings in early warning and conflict analysis* (forthcoming).

EU-CIVCAP. DL3.2, *Report on the EU’s capacities for conflict prevention* (forthcoming).

EU-CIVCAP. *EU Capabilities for Conflict Prevention and Peacebuilding: A Capabilities-Based Assessment* (2016).

EUGS, Shared Vision, Common Action: A Stronger Europe. A Global Strategy for the European Union’s Foreign and Security Policy. 2016. Online Available: https://europa.eu/globalstrategy/sites/globalstrategy/files/eugs_review_web.pdf (accessed 28 November 2016).

European Centre for Development Policy Management. Factsheet – EEAS Mediation Support Project – Knowledge Product. November 2012. Online Available: <http://ecdpm.org/wp-content/uploads/2013/11/EEAS-Mediation-Factsheet-Dialogue-Prevent-Mitigate-Electoral-Violence.pdf> (accessed 28 November 2016).

European Commission. 4th JRC ECML Workshop: Unmanned Aerial Systems for Rapid Mapping. Online Available: <http://lunar.jrc.it/critech/Events/4ECMLWorkshopUnmannedAerialSystems/tabid/106/Default.aspx> (accessed 28 November 2016).

European Commission. Comprehensive Annual Report on CSDP and CSDP-related Training (CART), November 2011. Online Available:

http://eeas.europa.eu/csdp/documents/pdf/st17438_en11_en.pdf.

European Commission. Towards a European strategy for the development of civil applications of Remotely Piloted Aircraft Systems (RPAS), 6 September 2012. Online Available:

<http://register.consilium.europa.eu/doc/srv?l=EN&f=ST%2013438%202012%20INIT> (accessed 28 November 2016).

European Commission, Operating in situations of conflict and fragility: EU staff handbook, June 2015. Online Available:

<http://capacity4dev.ec.europa.eu/t-and-m-series/blog/operating-situations-conflict-and-fragility-eu-staff-handbook-0> (accessed 28 November 2016).

European Commission. EU Policy on Training for CSDP, July 2016.

European Commission. Instrument contributing to Stability and Peace, preventing conflict around

the world. Online Available: http://ec.europa.eu/dgs/fpi/what-we-do/instrument_contributing_to_stability_and_peace_en.htm (accessed 28 November 2016).

European Commission and HR/VP. Taking forward the EU's Comprehensive Approach to external conflicts and crises - Action Plan 2016-17, July 2016.

European Commission and HR/VP. The EU's comprehensive approach to external conflict and crises, December 2013.

European Council. A Secure Europe In A Better World, December 2003.

European Global Navigation Satellite System Agency. <http://www.gsa.europa.eu/european-gnss/galileo/galileo-european-global-satellite-based-navigation-system> (accessed 28 November 2016).

European Parliament. Policy Department DG External Policies, *Space, Sovereignty and European Security*. Building European Capabilities in an Advanced Institutional Framework, 2014.

European Parliament. Space, Sovereignty and European Security, 2014. Online Available:

[http://www.europarl.europa.eu/RegData/etudes/etudes/join/2014/433750/EXPO-SEDE_ET\(2014\)433750_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/etudes/join/2014/433750/EXPO-SEDE_ET(2014)433750_EN.pdf) (accessed 28 November 2016).

European Union Institute for Security Studies. *Space Security for Europe*, Report 29, July 2016.

Online Available:

http://www.iss.europa.eu/uploads/media/Report_29_Space_and_Security_online.pdf (accessed 28 November 2016).

Folke Bernadotte Academy. "Swedish contribution to Civilian Operations – Structures, Routines, and Experiences", in *L'Italia nelle missioni civili dell'UE. Criticità e Prospettive*, Quaderni IAI,

35/2010. Online Available: http://www.iai.it/sites/default/files/quaderni_35.pdf (accessed 28 November 2016).

French Defence Ministry. Carte opération Barkhane, 2016. Online Available: <http://www.defense.gouv.fr/operations/sahel/cartes/carte-operation-barkhane> (accessed 28 November 2016).

Himelfarb, Sheldon, *Can Big Data Stop Wars Before They Happen?*, Foreign Policy, April 2013, <http://foreignpolicy.com/2014/04/25/can-big-data-stop-wars-before-they-happen/>.

Hoyle, Craig “First French Reapers arrive in Africa”, in *Flight Global*, 8 January 2014. <https://www.flightglobal.com/news/articles/first-french-reapers-arrive-in-africa-394655/> (accessed 28 November 2016).

IIIS, *The Military Balance 2016*, London: Routledge, 2016.

Italian Foreign Ministry. Opportunità in missioni civili in ambito PESC/PSDC, 2016. Available Online: http://www.esteri.it/mae/it/ministero/servizi/italiani/opportunita/nella_ue/opportunitapescpesd.html (accessed 28 November 2016).

Kalrsrud, John and Rosén, Frederic “In the Eye of the Beholder? The UN and the Use of Drones to Protect Civilians” *Stability, International Journal of Security & Development*, 2(2), p.Art. 27. 2013.

Karock, Ulrich, *Drones: engaging in debate and accountability*, Quick Policy insight, Directorate General for External Policies, Policy Dept., European Parliament. Online Available: http://www.europarl.europa.eu/meetdocs/2014_2019/documents/sede/dv/sede210915policyinsightdrones_/sede210915policyinsightdrones_en.pdf (accessed 28 November 2016).

Kington, Tom and Tran, Pierre “European Ministers to study MALE UAV Program in Defense News. <http://www.defensenews.com/story/defense/air-space/isr/2015/05/18/european-defense-ministers-to-study-male-uav-program/27526023/>.

Kington, Tom and Tran, Pierre “European Ministers To Study MALE UAV Program”, 19 May 2015, <http://www.defensenews.com/story/defense/air-space/isr/2015/05/18/european-defense-ministers-to-study-male-uav-program/27526023/> (accessed 28 November 2016).

Korski Daniel and Gowan, Richard, *Can the EU rebuild failing states? A review of EU Civilian Capacities*, 2009, London: ECFR, Online Available: http://www.ecfr.eu/page/-/ECFR18_-_Can_the_EU_rebuild_failing_States_-_a_Review_of_Europes_Civilian_Capacities.pdf (accessed 28 November 2016).

Mancini, Francesco (ed.), “New Technology and the Prevention of Violence and Conflict,” New York: International Peace Institute, April 2013. Online Available: https://www.ipinst.org/wp-content/uploads/publications/ipi_epub_new_technology_final.pdf (accessed 28 November 2016).

Marina Militare, *Operazioni Conclude: Mare Nostrum*. Online Available

<http://www.marina.difesa.it/cosa-facciamo/operazioni-conclude/Pagine/mare-nostrum.aspx>

(accessed 28 November 2016).

Pirozzi, Nicoletta ‘EU Performance in Civilian Crisis Management’, in Richard Whitman and Stefan Wolff (eds.), *The European Union as a Global Conflict Manager*, London and New York, Routledge, 2012, pp. 189-208.

Pirozzi, Nicoletta, ‘The European Union and Civilian Crisis Management after Lisbon’, in *European Foreign Affairs Review* 20, no. 2 (2015): 283–302.

Puig, Larrauri Helena and Kahl, Anne *Technology for peacebuilding*, International Journal for Stability and Development, 2013, Online Available:

<http://www.stabilityjournal.org/articles/10.5334/sta.cv/> (accessed 28 November 2016).

Puig, Larrauri Helena and Meier, Patrick ‘Peacekeepers in the Sky: The Use of Unmanned Unarmed Aerial Vehicles for Peacekeeping’, *ICT4Peace Foundation*, Sept. 2015. Online Available: <http://ict4peace.org/wp-content/uploads/2015/09/Peacekeepers-in-the-Sky1.pdf>. (accessed 28 November 2016).

Satellite Imaging Corporation, Pleiades-1A Satellite Sensor. Online Available:

<http://www.satimagingcorp.com/satellite-sensors/pleiades-1/> (accessed 28 November 2016).

Stevenson, Beth, ‘France orders third Reaper system’, in *Flight Global*, 17 December 2015, Online Available: <https://www.flightglobal.com/news/articles/france-orders-third-reaper-system-420169/> (accessed 28 November 2016).

Stevenson, Beth, ‘Swedish army evaluates Mali UAV deployment’, in *Flight Global*, 28 October 2015. Online Available: <https://www.flightglobal.com/news/articles/swedish-army-evaluates-mali-uav-deployment-418264/> (accessed 28 November 2016)

Swedish National Spaceboard, *Swedish Satellites*. <http://www.snsb.se/en/Home/Space-Activities-in-Sweden/Satellites/>.

Tellidis, I. and Kappler, S., ‘Information and communication technologies in peacebuilding: Implications, opportunities and challenges’, *Cooperation and Conflict* Vol. 51(1), 2016, pp. 75 –93.

The Consortium four leading European institutions in this field: Berghof Foundation, ESSEC-Irene, MediatEUR, and Swisspeace <http://www.berghof-foundation.org/programmes/dialogue-mediation-peace-support-structures/mediation-support-to-the-european-external-action-service-eas/> (accessed 28 November 2016).

The Swedish National Space Board’s long-term Strategy focused on 2011/2015, 2011, Online Available:

http://www.snsb.se/Global/Strategi%20i%20eng%20sammanfattning%2020101115_2.pdf

(accessed 28 November 2016).

UN Security Council, *Report of the Secretary-General and High Representative for the Common Foreign and Security Policy of the European Union on the activities of the European Union military operation in Chad and the Central African Republic*, 23 April 2009, Online Available:

<http://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/CAR%20S%202009%20214.pdf> (accessed 28 November 2016).

UN. Brahimi Report Report of the Panel on United Nations Peace Operations, (2000), Online Available: http://www.un.org/en/events/pastevents/brahimi_report.shtml (accessed 28 November 2016).

UN. Peace and security, Online Available at <http://www.un.org/en/peacekeeping/operations/peace.shtml> (accessed 28 November 2016).

ANNEXES

Seconded personnel in Civilian CSDP Missions. Source: EEAS, Personnel Figures of the Civilian CSDP Missions (31/08/2016)

| Countries or Institutions | | Seconded Personnel | | | | | | | | | | | Totals per Country/ EU Institution |
|---|------------|---|--------------|--------------|-------------|-------------|---------------|-------------------|--------------|-------------------|-------------|------------------|------------------------------------|
| | | Civilian CSDP Missions as of [31/08/2016] | | | | | | | | | | | |
| | | Civilian | | | | | | | | | | | |
| | | EULEX Kosovo | EUAM Ukraine | EUMM Georgia | SC, SPO | EUBAM Rafah | EUPOL COPPS | EUPOL Afghanistan | EUCAP Nestor | EUCAP Sahel Niger | EUBAM Libya | EUCAP Sahel Mali | |
| | | Europe - Balkans | | | Middle East | | Asia | | Africa | | | | |
| Kosovo | Ukraine | Georgia | The Hague | Rafah | Palestine | Afghanistan | Kenya Somalia | Niger | Libya | Mali | | | |
| EU Institution | | | | | | | | | | | | 0 | |
| Austria | 12 | 3 | 6 | | | | | | | | | 21 | |
| Belgium | 4 | | 3 | | | | | 5 | | | 6 | 18 | |
| Bulgaria | 28 | 1 | 10 | | | 1 | | | | | | 40 | |
| Croatia | 5 | | 3 | | | 1 | | | | | | 9 | |
| Cyprus | | | | | | | | | | | | 0 | |
| Czech Republic | 11 | 4 | 13 | | | 1 | 2 | | | | | 31 | |
| Denmark | 7 | 5 | 9 | | | 2 | 9 | 1 | 1 | 1 | 3 | 38 | |
| Estonia | 1 | 4 | 2 | | | 1 | 2 | | | | | 10 | |
| Finland | 10 | 5 | 11 | | | 4 | 9 | 6 | | | 3 | 48 | |
| France | 3 | 1 | | | | 3 | | | 18 | | 20 | 45 | |
| Germany | 72 | 15 | 9 | 3 | 1 | 4 | 5 | 3 | 4 | 3 | 5 | 124 | |
| Greece | 10 | | 9 | | | | | | | | | 19 | |
| Hungary | 8 | | 11 | | | | | | | | | 19 | |
| Ireland | 6 | 2 | 2 | | | 2 | 1 | 1 | | | 2 | 16 | |
| Italy | 23 | 5 | 2 | | 1 | 6 | | 3 | 4 | 1 | 4 | 49 | |
| Latvia | | 2 | 3 | | | | 1 | | | | | 6 | |
| Lithuania | 4 | 5 | 3 | | | | | | | | | 12 | |
| Luxembourg | 1 | | | | | | | | | | 1 | 2 | |
| Malta | 3 | | | | | | | | | | | 3 | |
| Netherlands | 17 | 4 | 8 | 2 | | 5 | 3 | 4 | | 1 | 1 | 45 | |
| Poland | 105 | 1 | 17 | | | | 1 | | | | | 124 | |
| Portugal | 1 | | 2 | | | | | | | | | 3 | |
| Romania | | 7 | 21 | | | 1 | 6 | 2 | | | 5 | 42 | |
| Slovakia | 3 | | 3 | | | | | | | | | 6 | |
| Slovenia | 7 | | | | | 2 | | | | | | 9 | |
| Spain | | 1 | | | | 1 | | | 3 | 2 | 4 | 11 | |
| Sweden | 27 | 11 | 20 | 3 | | 7 | 10 | 2 | 2 | 2 | 1 | 85 | |
| United Kingdom | 7 | 4 | 11 | 3 | | 1 | 2 | 1 | 1 | | 1 | 31 | |
| Total (1) | 375 | 80 | 178 | 11 | 2 | 41 | 52 | 23 | 38 | 10 | 56 | 866 | |
| Third States | | | | | | | | | | | | | |
| Australia | | | | | | | | | | | | 0 | |
| Canada | | 2 | | | | 1 | | | | | | 3 | |
| Norway | | | | | | | | | | | | 0 | |
| Switzerland | 1 | 1 | | | | | | | | | 1 | 3 | |
| Turkey | 1 | | | | | | | | | | | 1 | |
| United States | 10 | | | 2 | | | | | | | | 12 | |
| Georgia | | | | | | | | | | | | 0 | |
| Total (2) | 12 | 3 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 19 | |
| TOTAL Seconded Staff per Mission (1+2) | 367 | 83 | 178 | 13 | 2 | 42 | 52 | 23 | 38 | 10 | 57 | 885 | |
| TOTAL Seconded Approved in OPLAN (*) | 500 | 105 | 253 | 54 | 2 | 49 | 66 | 25 | 46 | 11 | 62 | 1173 | |

Notes

(*) - Approved in Council Decision / Budgetary Impact Statement
 SC, SPO = Specialist Chamber, Specialist Prosecutor's Office

Contracted International and Local Personnel in Civilian CSDP Missions. Source: EEAS, Personnel Figures of the Civilian CSDP Missions (31/08/2016)

| Countries or Institutions | | Contracted International and Local Personnel | | | | | | | | | | | Totals per Country/ EU Institution |
|---------------------------|----------------|--|--------------|--------------|-----------|--------------|---------------|-------------------|--------------|-------------------|-------------|------------------|------------------------------------|
| | | Civilian CSDP Missions as of [31/08/2016] | | | | | | | | | | | |
| | | Civilian | | | | | | | | | | | |
| | | EULEX Kosovo | EUAM Ukraine | EUMM Georgia | SC, SPO | EU BAM Rafah | EUPOL COPPS | EUPOL Afghanistan | EUCAP Nestor | EUCAP Sahel Niger | EUBAM Libya | EUCAP Sahel Mali | |
| | | Europe - Balkans | | | | Middle East | | Asia | Africa | | | | |
| Kosovo | Ukraine | Georgia | The Hague | Rafah | Palestine | Afghanistan | Kenya Somalia | Niger | Libya | Mali | | | |
| Member States | EU Institution | | | | | | | | | | | | |
| | Austria | 4 | | 1 | 3 | | | 1 | | | | | |
| | Belgium | 3 | | 1 | 1 | | | 1 | 1 | 4 | | 1 | |
| | Bulgaria | 30 | 3 | | 1 | | | 1 | 2 | | | | |
| | Croatia | 4 | | | 4 | | | 1 | | | | | |
| | Cyprus | | | | | | | | | | | | |
| | Czech Republic | 3 | | 2 | 1 | | | | | | | | |
| | Denmark | 1 | | | 2 | | | | | | | | |
| | Estonia | 2 | | 1 | | | 1 | 1 | | | | | |
| | Finland | 12 | 2 | 2 | 3 | | 1 | 6 | 2 | | | | |
| | France | 7 | | | | 1 | 1 | 1 | 1 | 9 | 1 | 7 | |
| | Germany | 3 | 1 | 1 | 2 | | | 4 | 4 | | | 1 | |
| | Greece | 6 | 1 | 1 | 1 | | | 2 | 2 | | | | |
| | Hungary | 9 | 2 | 3 | 1 | | 1 | 5 | 1 | | | | |
| | Ireland | 4 | 2 | 1 | 4 | | | 4 | | 1 | | | |
| | Italy | 6 | | 1 | 2 | | | 1 | 3 | | | | |
| | Latvia | 4 | | 1 | | | | | | | | | |
| | Lithuania | 1 | 3 | 1 | | | 1 | 1 | | | | | |
| | Luxembourg | | | | | | | | | | | | |
| | Malta | | | | | | 1 | | | | | | |
| | Netherlands | 5 | 1 | | 6 | | | 1 | | | | 1 | |
| Poland | 19 | | 1 | | | | 1 | 3 | | | | | |
| Portugal | 6 | 1 | | 3 | | | | 1 | 1 | | 4 | | |
| Romania | 28 | 3 | 5 | 1 | | 3 | 13 | 4 | 8 | | 11 | | |
| Slovakia | | | | | | | | | | | | | |
| Slovenia | 5 | 2 | | 1 | | | | | | | | | |
| Spain | 6 | 2 | 2 | | | 2 | | 2 | | | 1 | | |
| Sweden | 5 | | | 1 | | | 5 | 1 | | | | | |
| United Kingdom | 23 | 3 | 3 | 11 | | 1 | 11 | 6 | | | 1 | | |
| Total (t) | 196 | 26 | 27 | 48 | 1 | 15 | 63 | 28 | 22 | 2 | 27 | 455 | |

| | | | | | | | | | | | | | |
|--------------|------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Third States | Canada | | | | 1 | | | | | | | | 1 |
| | Turkey | 1 | | | | | | | | | | | 1 |
| | United States | | | | | | | | | | | | 0 |
| | Total (2) | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |

| | | | | | | | | | | | | |
|---|-----|----|----|----|---|----|----|----|----|---|----|-----|
| TOTAL <u>International</u> Contracted Staff per Mission (1+2) | 197 | 26 | 27 | 49 | 1 | 15 | 63 | 28 | 22 | 2 | 27 | 457 |
|---|-----|----|----|----|---|----|----|----|----|---|----|-----|

| | | | | | | | | | | | | |
|---|-----|----|-----|---|---|----|-----|---|----|---|----|------|
| TOTAL <u>Local</u> Contracted Staff per Mission | 749 | 79 | 109 | 0 | 7 | 42 | 141 | 3 | 34 | 2 | 34 | 1200 |
|---|-----|----|-----|---|---|----|-----|---|----|---|----|------|

| | | | | | | | | | | | | |
|------------------------|-----|-----|-----|----|---|----|-----|----|----|---|----|------|
| TOTAL Contracted Staff | 946 | 105 | 136 | 49 | 8 | 57 | 204 | 31 | 56 | 4 | 61 | 1657 |
|------------------------|-----|-----|-----|----|---|----|-----|----|----|---|----|------|

| | | | | | | | | | | | | |
|---|-----|----|----|-----|---|----|----|----|----|---|----|-----|
| TOTAL <u>International</u> Contracted Approved in OPLAN (*) | 300 | 35 | 29 | 163 | 2 | 20 | 77 | 33 | 32 | 6 | 35 | 732 |
|---|-----|----|----|-----|---|----|----|----|----|---|----|-----|

| | | | | | | | | | | | | |
|--|-----|-----|-----|---|---|----|-----|----|----|---|----|------|
| TOTAL <u>Local</u> Contracted Approved in OPLAN (*) (**) | 800 | 115 | 129 | 0 | 7 | 45 | 147 | 10 | 48 | 2 | 40 | 1343 |
|--|-----|-----|-----|---|---|----|-----|----|----|---|----|------|

| | | | | | | | | | | | | |
|--|------|-----|-----|-----|---|----|-----|----|----|---|----|------|
| TOTAL Contracted Approved in OPLAN (*) | 1100 | 150 | 158 | 163 | 9 | 65 | 224 | 43 | 80 | 8 | 75 | 2075 |
|--|------|-----|-----|-----|---|----|-----|----|----|---|----|------|

Notes

(*) - Approved in Council Decision / Budgetary Impact Statement

(**) - Contracted staff members will automatically become National Contracted Staff if they reside in Belgium